NP Tests New Mechanical Reefer

December 23/30, 1957

# RAILWAY AGE weekly



# CTC pays off big on Maine Central

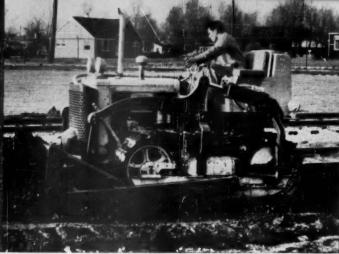
Savings on 24-mile project return 32% on net investment

# New CNR line opens big mining area

First leg of 294-mile route taps ore, timber reserves



helps you cut maintenance and idle gang time



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   Minimize formation of piston and ring belt deposits.
   Prevent formation of excessive varnish and sludge.
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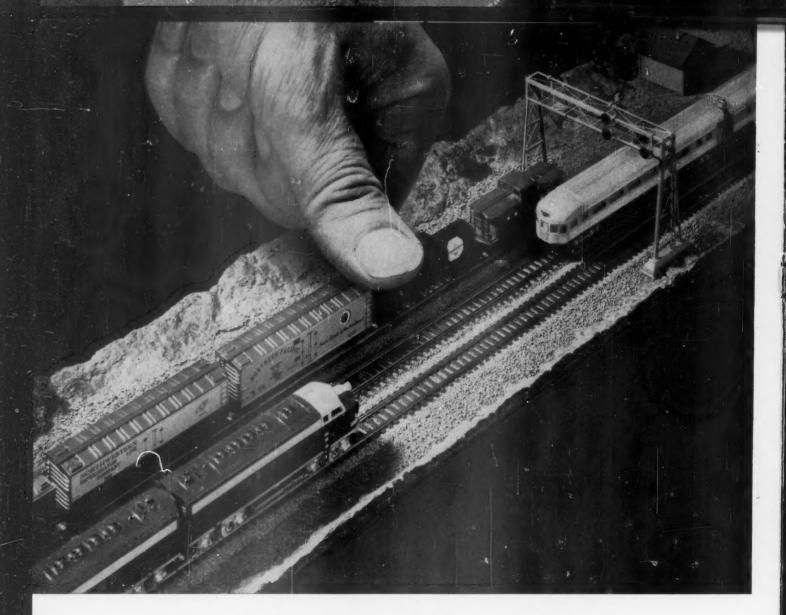
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The AAR has recommended that riveted yokes be prohibited in interchange as soon as possible. The substitution of our Keyless Yoke for the wrought iron design will correct immediately and permanently this expensive problem.

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# Union chief wants labor budgeting ......p. 8 Carroll charges that railroads make second-class citizens of maintenance-of-way employees. He wants opportunity for 52 weeks

# of work. But rejects guaranteed-annual-wage idea.

# RR prosperity tied to new look for labor ......p. 9 Traditional outlooks handicap the railroad industry, says the Canadian National's O.M. Solandt. But he doesn't limit resistance to change to the brotherhoods. Many railroaders, he claims, are too satisfied with the status quo. Is this because their training and experience don't prompt them to visualize things as they might

# Railroads and ICC bumble rate issues ......p.16

Politely, but straight to the point, Professor Ernest Williams places the blame where he sees it. Both the commission and the railroads have been ineffective, he says, in truck vs. rail rate cases. He thinks the railroads' own policies may have done them more harm than the ICC's actions.

# Continuing OUTRAGE—Sauce for the goose story......p.17

How come full crew laws are still in effect in 16 states? Who needs them? Nobody tells the buslines to man their cruisers with copilots. But is it any easier to steer along jam-packed highways than to run a train on tracks?

# CTC on the Maine Central slashes costs ......p.19

Single tracking puts money in the bank. With savings on rail, ties, ballast, and labor, this road figures a 24-mile traffic control installation will mean a 32% annual return on its gross \$660,000 cost.

# How does your ad budget compare? ......p.20

Railroads spent \$15 million in all forms of advertising in 1956. It looks like spending in 1957 comes pretty close to matching that. Here's a yardstick summary of how much the top rail advertisers put into which media.

# What's new about this car? .....p.26

A prototype reefer has a center sill that serves as a fuel tank. It has a fused Fiberglas overlay on plywood to give a smooth, hard interior. It's got a 1,200 square foot evaporator coil. Pacific Car & Foundry thinks the 40-foot car's 2,530 cubic foot capacity makes it ideal for frozen food transport.

# Now industry can tap a rich mining area .....p.28

Blasting through the north woods, the Canadian National over-

came sub-zero weather, heavy snow, and unprecedented engineering problems to open up its new Chibougamau line.

# The Action Page—Craft unions are on the spot ......p.42

Picture a Mike Quill taking over railway labor. Would that be progress? Anyway, it's time for the brotherhoods to develop a statesmanlike approach. It would be good for the industry-and good for labor. But the brothers should strengthen the craft unions.

### Short and Significant

## Fifth lubricator pack approved . . .

Conditional approval status has been given by the AAR to the Journapak lubricator for unlimited application in cars in interchange. Okay was announced by Security Railway Products Company. Other units already approved include Miller, Redipak, Rolin, and Uni-Pak.

### Joint rates with a trucker? . . .

The idea is being given serious thought by one railroad. Plan would be to establish through rates and service between railroad and motor carrier, with each becoming an extension, traffic-wise, of the other. Significant element is the nature of the trucker: a common carrier, not a rail subsidiary.

## Attack on commutation problems . . .

was started by the Chicago & North Western last week. Aim is to weed out practices one spokesman called valuable only for their place in history. A new fare structure and fewer stations within Chicago are part of the plan. New commuter equipment—though on the drawing boards—isn't part of the program now.

### Boston & Maine is withdrawing . . .

from the mail-pay case. It has told the ICC it wants out in view of a separate mail-pay agreement it has reached with the Post Office Department. It's the first road to withdraw from the pending eastern case. Meanwhile, similar general cases in southern and western territories have been settled on compromise bases.

### 'Super Chief,' 'El Capitan' consolidation . . .

can be started January 12, provided reservations don't warrant operation as separate trains. Santa Fe received authority from the Illinois Commerce Commission to combine the two luxury trains during slack periods of the year.

### Freas is new ICC chairman . . .

The former California PUC rate expert succeeds Owen Clarke at the commission's helm. The rotating, seniority appointment will be effective January 1.

# Week at a Glance CONT.

# **Current Statistics**

Operating revenues, ten month	hs
1957\$1	8,836,710,505
1956	8,787,491,636
Operating expenses, ten monti	hs
1957\$6	6,877,916,693
1956	6,726,548,826
Taxes, ten months	
1957	\$934,003,618
1956	953,933,641
Net railway operating income t	en months
1957	\$799,108,842
1956	896,498,491
Net income estimated, ten mor	
1957	\$617,000,000
1956	716,000,000
Average price 20 railroad stoc	ks
December 17, 1957	63.37
December 18, 1956	96.77
Carloadings revenue freight	
Forty-nine weeks, 1957	33,896,766
Forty-nine weeks, 1956	35,942,206
Average daily freight car surp	
Wk. ended Dec. 14, 1957	44,609
Wk. ended Dec. 15, 1956	5,907
Average daily freight car short	lage
Wk. ended Dec. 14, 1957	13
Wk. ended Dec. 15, 1956	4,309
Freight cars on order	
December 1, 1957	59,194
December 1, 1956	119,626
Freight cars delivered	
Eleven months, 1957	92,891
Eleven months, 1956	59,820

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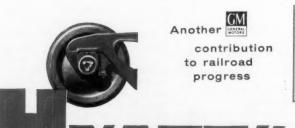
# IT'S GOOD FOR YOU-AND THE WHOLE RAILROAD INDUSTRY... EVERY TIME A FREIGHT CAR ROLLS OUT ON ROLLER BEARINGS!

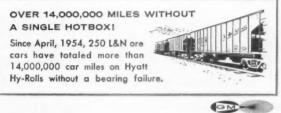
Ever see a prosperous town without a railroad track? Highways and skyways are important, of course, but the basic foundation of America's productivity . . . and the prosperity of every citizen . . . is still the familiar rumble of steel wheels on steel rails.

Down through the years, faster and faster freight service has sparked the expansion of our nation's economy by constantly accelerating the flow of raw materials and finished products. Improved equipment has solved every major time-saving problem except one—the hotbox. And today this "Achilles' heel" of fast freight is beginning to be

eliminated by a new low-cost roller bearing that soon pays for itself in operating economies.

HYATT Hy-Roll Bearings . . . replacing trouble-some friction bearings which burden the railroads with needless lubrication, inspection and maintenance costs . . . not only end hotbox delays once and for all, but increase the earning power of cars by keeping them on the go. That's why every new car equipped with HYATT Hy-Rolls helps all railroads . . . and through them, helps you. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.





YATTHY-ROLL BEARINGS
FOR NON-STOP FREIGHT



# Union Chief Wants Labor Budgeting

BMWE's Carroll admonishes railroads for making second-class citizens of M/W employees. Asks for 52 weeks of work opportunity but no guaranteed annual wage.

"The Brotherhood of Maintenance of Way Employees has never suggested an annual wage," said President T. C. Carroll last Monday night as he addressed the Maintenance of Way Club of Chicago.

"We have, however, suggested, and we are progressing and will continue to progress the theory that maintenance men should be guaranteed 52 weeks of work opportunity. But we don't want them paid unless they work . . . Thousands of partially-employed workers are reduced to the category of second-class citizens by virtue of their reduced take-home pay, because they earn wages only part of the year and then go on the unemployment benefit rolls. They are placed in this predicament," he charged, "by the failure of the railroads to budget their maintenance of way expenditures properly."

He approached the subject of budgeting from "the general viewpoint, with particular stress on the human element."

Two factors have to be remembered when discussing M/W budgeting, the president of the Brotherhood of Maintenance of Way Employees said. First is the budget of the railroad and second is the budget of the employee.

"I certainly am not going to question the right of managements to budget their maintenance-of-way work, or the necessity for this practice," he continued. Mr. Carroll indicated, however, that he is wondering "whether too much stress has been placed on the financial aspect of budgeting to the detriment of the carrier's maintenance-of-way force. . . Isn't it just as important to budget manpower as it is to budget dollars?"

A discussion period followed Mr. Carroll's address. When asked for his views regarding the adoption of a shorter work week for M/W forces, he replied: "Frankly, I cannot see any reason for presently changing to below the 40-hour week." When asked about the effect upon M/W efficiency and economy of having to employ train crews on maintenance machines, Mr. Carroll stated: "It is our position that all maintenance of way machines should be manned by maintenance of way employees. Period."

F. J. Corporon, president of the M/W Club of Chicago, and superintendent, maintenance of way, Chicago, South Shore & South Bend, asked Mr. Carroll: "You have probably noted in the Railway Age recently a series of articles all under the general heading of "Outrage," and I was wondering what policies your organization, or union organizations as a whole, might have in regard to helping the railroad industry in the furtherance of that argument?"

The brotherhood president replied: "I defy anyone to have a greater interest in his railroad than the officers of my brotherhood have, generally speaking . . . The railroads are not getting a square deal . . . I hope to God that there's some way the railroads can work themselves out of this difficult problem they are in without seeking and obtaining government subsidization . . . No one wants government operation of the railroads or government ownership of the railroads, but it seems that there are some people in our industry that are such pronounced crepe hangers that they think the industry is just a few feet away from burying itself.'

Mr. Carroll went on to advise that the Railway Labor Executives Association has "... assured the Association of American Railroads that we will support them to the limit in getting the proper legislation enacted by the Congress of the United States to give the railroads a square deal." He concluded: "and we'll do everything that's humanly possible to do this."

Efficient maintenance employees must be railroad-trained and, once lost, others must be trained to take their places, the union president pointed out. Mr. Carroll said he believes that a stable force of trained, ex-

# Reaction to Mr. Carroll's Address

Railway Age asked a number of railroad men attending the meeting for their reaction to Mr. Carroll's talk and his answers to the questions which had been submitted from the floor. These comments followed:

- ▶ "What he doesn't realize is that we have the right to purchase all of a man's time or just part of it, as we may choose. It's just like buying any other commodity; you don't buy a truckload of coal when you need only a half truckload."—Engineer, M/W.
- ▶ "He gave us something to think about and made us realize that there are instances where management is at fault."—Assistant Chief Engineer.
- ► "That was a good talk. But, how in the hell can we surface track in the winter as cheaply as we can in the summer? . . . You know, that's one of the reasons I like your magazines—you're not afraid to write about the labor situation."—Roadmaster.
- ► "He made a good presentation of his case. But, we can't even buy a new machine without first consulting the organization."—General Roadmaster.
- ▶ "His talk was very informative, very direct and well done. But, statistics can be used any way you want to use them and they may or may not, as you choose, show the true picture. Let's face it, some maintenance employees just don't want to work all year.—Assistant Chief Engineer.

perienced workers is an obvious advantage to railroads. The carriers have not, however, fully understood the potential benefits of stabilized employment.

"Stability of employment is not a onesided proposition. To the employee it means greater peace of mind. It encourages him to remain in the industry. To the employer, it means a more stable and experienced work force, improved employee morale, and greater employee efficiency and productivity."

Mr. Carroll referred to Railroad Retirement Board figures. "During 1955," he said, "310,727 employees. . . represented by our organization received compensation on Class I railroads. According to employment figures issued by the ICC, however, the average middle-of-month count . . in 1955 was 182,654—some 128,000, or 41%, less than the total number who received compensation during the year."

Mr. Carroll cited RRB figures which showed that 39.7% of the 310,727 employees in 1955 worked in six months or less. In 1955, the board's figures showed, according to Mr. Carroll, that 34.6% of these employees earned less than \$1,000 and 61% earned less than \$3,000. "These figures do not, in my opinion, reflect efficient manpower budgeting by the railroads."

"The serious effect of unstable employment on maintenance of way workers," Mr. Carroll went on, "is further illustrated by the fact that during the fiscal year 1956-57 they received \$32,112,000 in unemployment benefits under the Railroad Unemployment Insurance Act."

Mr. Carroll chided railroads for their "perennial policy... to reduce forces in the winter and increase them during the summer. Here, again, the lack of a firm annual budget policy impedes a more equal distribution of work throughout the year."

"Our organization has never tried to stand in the way of technological change," Mr. Carroll stressed. "We realize that progress cannot be stopped. We do feel, however, that in the introduction of work innovations, in the transition to more advanced mechanization, railroads have



# Screen Test for Rolling Stock at Southern's New Yard

Closed-circuit television is used to "grab" car initials and numbers at the entrances to the Southern's Atlanta yard. Four TV cameras (two are standbys), scan two inbound tracks at west entrance. Four more at the east entrance provide short, medium, and long range focus on three tracks. Two more scan one track at the north entrance. Each camera picks up a

15-20 ft area of a passing car. All 10 cameras are linked by closed-circuit to a master TV console, shown here in the Radio Corporation of America installation. Control panel enables clerk to pick up any of the camera-views and to control nighttime lighting. As inbound train nears cameras, it flashes light and buzzer gives clerk one-minute warning.

ignored the effect of these changes on the employees. . .they have too often failed to share the gains of technological change with their employees.

"The productivity of maintenance-ofway employees has increased tremendously," he claimed. "At the same time we have witnessed a deterioration in working conditions and a reduction in take-home pay of many employees assigned to work away from their homes over extensive territories on machines or in mobile gangs or mechanized units. . . I feel that these are not problems of the employees alone, but of the employees and the industry." Mr. Carroll concluded by declaring: "It is only when both the financial element and the human element are recognized and given proper consideration that the maintenance of way budget of the railroad company can be established on the most effective and sound basis. It is my firm opinion that, in setting up their allocations for maintenance-of-way work, a more realistic budgeting of manpower by the railroads and a greater realization and consideration of the employment and earnings problems of the individual employee will be to the mutual advantage of both the carriers and their employees."

# RR Prosperity Tied to New Look for Labor

The traditional outlook is an industry handicap, Solandt says—He hopes the brotherhoods will adopt more progressive attitudes and move with the times to bolster industry.

Reactionary labor attitudes threaten to have a "disastrous effect" on railroads unless unions "recognize the dangers and show willingness to change."

The influence of the rail brotherhoods, according to Canadian National Vice-President O. M. Solandt, is one of a handful of factors bearing vitally on the indus-

try's future. He told the Canadian Railway Club at Montreal that conditions stemming from entrenched labor positions "have already seriously interfered with increasing productivity."

Resistance to change was not limited by Dr. Solandt to the brotherhoods, however. Up-the-ladder personnel development helps to build up a "traditional outlook" throughout the industry, he said. Railroaders "are too often satisfied with things as they have been because their training and experience give them little stimulus to visualize things as they might be."

Government regulation and the capital necessarily tied up in a railroad plant are other sea anchors slowing progress, Dr. Solandt declared.

A magnificent job was done by unions in "improving the lot of the railway worker at a time when the position of the industrial worker in general was not a happy one," he stated. "Being only human, they have continually sought new privileges and at the same time refused to give up old ones."

"This is leading to a steadily increasing rigidity in the organization and operating methods of railways. . . Unions in other fields have recognized [the importance of] steadily increasing productivity . . . and I am confident that railway unions will be no less progressive."

But, with all the problems of railroading, "railroad executives and workers have to be even more alert and progressive than their colleagues in other industries who deal with simpler and more manageable problems." Encouragement can be found, Dr. Solandt went on, in the railroader's outstanding characteristic: loyalty at all levels.

"A railway man may be at one moment violently supporting his union in an argument with management and at the next moment join with the boss in carrying out some difficult or dangerous task far beyond the immediate necessity of his job.

"Nowhere is this sense of loyalty better displayed than in the performance of the thousands of railway employees who carry out minor but nonetheless essential tasks throughout the length and breadth of the land—often without any immediate supervision."

Dr. Solandt, who joined the Canadian National two years ago after a non-rail-road career in sociology and operations research, called his talk a scientist's appraisal of the railroads.

It must be admitted, he stated, that railroads are not "adequately maintaining their competitive position in relation to other forms of freight transportation."

Attacks on the situation must be in three areas, he said: organization and management, technical problems, and sales.

"A fresh look" at the organizational pattern of railroads is about due, he said. Factors that originally determined such things as divisional setups have changed, he held, suggesting that regional (or other) patterns of organization now be considered.

Communications and data processing developments enable senior executives to function with current facts always before them, he said.

Technical progress will continue, he predicted, but said: "I do not look for any spectacular developments in equipment that will revolutionize railway economics in the next 10 or 20 years. There seems more to be gained by improving management and operating techniques, terminal layouts and operations, and signaling, than by improving equipment."

"A functional atomic locomotive could be built today," Dr. Solandt commented but he saw no "economic incentive" for it. He discussed potentials in nuclear electrification, however, and said a fusion, rather than fission, locomotive reactor had possibilities.

"The certainty of greater flexibility in fuel supply" and possibly lower capital and upkeep costs, make a direct-drive, oil-burning gas turbine a good bet for the future, Dr. Solandt said.

Specialized freight cars for large volume moves may also win greater favor, he said, while the advent of "cheaper diesel rail cars" could ease passenger losses.

It is essential, Dr. Solandt declared, "to say a fond farewell to the old order and to recognize quite clearly that for the future the price the shipper will pay . . . will usually be limited by the price" he can get from competitors.

"There must be better ways of pricing our product to take fuller advantage of the low-cost—high-capacity characteristics of railways... This might lead to a more rational subdivision of business between road and rail and finally to a more effective coordination of these two complementary modes of transport."

Shipper agitation for lower rates and union demands for higher pay make it imperative that railroads "increase the productivity of both men and equipment," Dr. Solandt said. He noted that railroad effectiveness depends on the successful integration of men and machines.

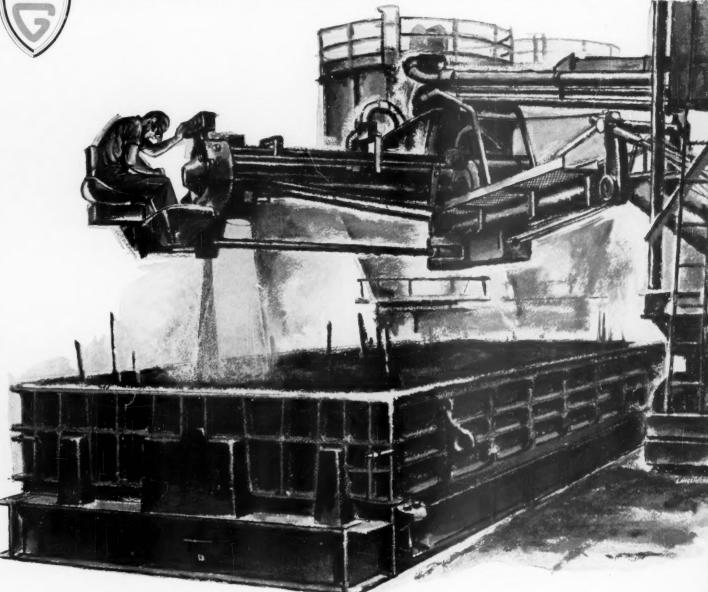
"All the impetus to change comes from the people," he reminded, "and so, unless the people are willing and anxious to move with the times, the system will become obsolete."

# Watching Washington with Walter Taft

- THE RATE INCREASE MOVEMENT entered the formal stage December 19, when railroads filed "special permission" applications asking the ICC to clear the way for filing the rate-advance tariffs. Such relief was required because of outstanding maximum rate orders and fourth-section situations.
- FOLLOW THROUGH TO FILING of the tariffs was expected to come December 23. Details were lacking but previous information indicated the railroads would propose selective advances to yield about \$175 million a year. They hoped to offset such cost advances as the November 1 wage increase to cost \$125 million a year, the \$20 million annual increase in payroll taxes becoming effective January 1, and other tax boosts of about \$30 million.
- NET INCOME DROP OF 20% under 1957 is the prospect for 1958. That's the present AAR view as set out by economist Burton N. Behling. It means that this net-after-charges figure for 1958 would be about \$600 million. A relatively smaller drop (16%) is expected at the net railway operating income stage. That would put 1958's n.o.i. at about \$800 million.
- DROP IN FREIGHT TRAFFIC, as measured by ton-miles, is expected to be about 5%. A like decline in passenger-miles is predicted. Meanwhile, 1958 gross should hold close to the 1957 level because the latest general freight rate increase will be in effect all year. It has applied to 1957 traffic only since August. Also involved in this revenue forecast are prospects of other rate increases now in discussion stage.
- THE UNFAVORABLE EARNINGS OUTLOOK is attributed by Dr. Behling to the "persistence of inflationary cost trends for wages and materials." He points out that another wage increase of 7 cents per hour will become effective November 1, 1958. Other advances could come as cost-of-living adjustments under escalator clauses of current agreements.
- 1958 CAPITAL EXPENDITURES are now seen at about the billion-dollar level. That would be a drop of more than 25% below this year's estimated \$1.4 billion. Latest railroad reports to the ICC indicate that the year will get under way with first-quarter outlays down 14.6% from the like 1957 period.
- THIS YEAR'S CARLOADING TOTAL will not drop more than about 6% below last year's, despite the much larger declines of recent weeks. The fall-off from the previous year will thus be about half what it was in other recent "readjustment" years. These were 1954, when loadings were 11.3% under 1953, and in 1949, when they were 15.9% under 1948.



Where railroad progress is cast in steel....



At General Steel Castings sand slingers ram sand at the rate of a ton per minute. Skilled operators and massive machines make short work of ramming huge and complex molds.

Modern railroads run on ideas . . . and one of the biggest is the General Steel concept of combining many separate parts into a large one-piece casting. This forward step has resulted in great progress for railroads and other industries throughout the world.

Users of castings from General Steel are assured of decreased maintenance costs, improved operation, greater safety and maximum availability of equipment.



Bulkhead flat car equipped with one-piece cast steel underframe and interlocking cast steel ends.

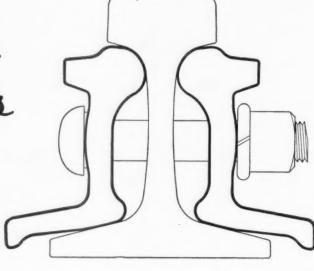
- · longer life with greater availability
- · safer shipping for heavier loads
- maintenance free cast steel underframe

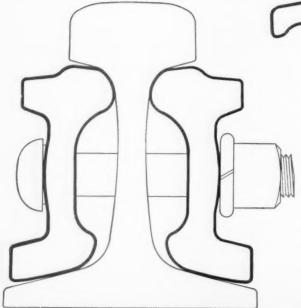
GENERAL STEEL CASTINGS

GRANITE CITY, ILL. . EDDYSTONE, PA. . AVONMORE, PA.

# Sure-Fit Headfree Joint

Christmas
and
New Year's
Greetings





Tighter Bolts
Reduced Stresses
Less Wear
Longer Life

RAIL JOINT COMPANY

DIVISION OF POOR & COMPANY (INC.)

50 CHURCH ST. NEW YORK 7, N. Y.

# In a modern yard which loads aren't humped?

"It has been our experience that humping cars in a modern yard, such as we have at Markham, is much safer from a rough handling standpoint than flat switching. This is because of the control we have over such cars through retardation.

"We do not hump diesel engines that are being handled dead in trains—because of their weight. Neither do we hump loaded piggyback cars, and since it is a violation of Interstate Commerce Commission rules, we do not hump explosives. All other commodities are humped."—O. H. Zimmerman, vice president—operation, Illinois Central.

# Can you hump piggyback loads in retarder yards?

"I think that the primary change that has occured is the fact that modern hump yards are now retarder yards. The 'Do Not Hump' placards were in the era of lack of confidence in the human riders properly controlling the speed of cars, or failing to get on them. With a modern retarder yard this no longer is true. In fact, the retarders, properly operated, permit

coupling speeds of less severity than were ordinarily possible with flat yard lead switching.

"With the recent developments in connection with automatic retardation, including radar measuring devices and devices for weighing or measuring rollability of cars, the hazard of overspeed impacts in retarder yards has been further reduced. "We have made some tests at our Silvis and Armourdale yards on an experimental basis with loaded piggyback cars but have not made it a regular practice to hump such cars. However, we have successfully humped cars containing commodities such as pipe, creosoted timbers and machinery."

—E. E. Foulks, assistant vice-president, Chicago, Rock Island & Pacific.

# What can you do with 'do not hump' cars?

"Here at Potomac Yard we handle quite a number of the so-called 'unhumpable' commodities, such as bottle beer, rolls of newsprint, television sets, bakery goods and other fragile commodities. Most of these cars come to Potomac Yard with placards on both sides and ends marked 'Do Not Hump.'

"Since both our southward and northward movements here require that cars go over the hump, and we have no facilities for classifying such cars except over the hump, we have for years humped the so-called 'unhumpable' cars. To date we have not had any piggyback cars through Potomac Yard and therefore we have not been confronted with this problem.

"Our present practice on the 'Do Not Hump' cars is to have the classification guide marked opposite the car with the word 'rider.' This is done by the classification clerk when the train is being prepared for classification at which time the clerk has access to the waybill and knows exactly what the car is loaded with.

"We have in both of our classification

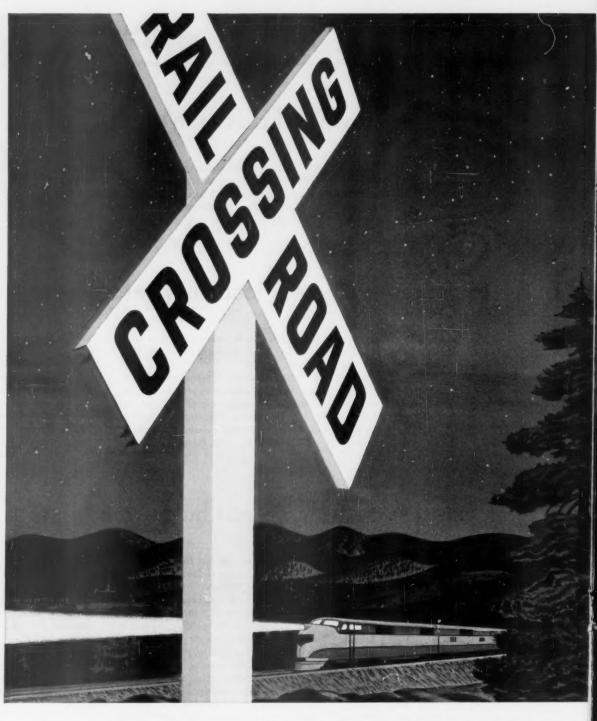
yards on each tour of duty three train service employees known as field brakemen. It is the duty and responsibility of these employees to ride all cars containing fragile commodities down into the classification track and see that the coupling is made at a speed that will eliminate any possibility of damage to the commodity. These same men then ride the next car into the track against the car containing the fragile commodity, again controlling the speed so that the coupling can be made without damage. Subsequent cars are classified into the track out of the retarder without rider protection.

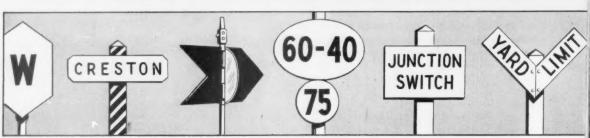
"We are currently in the process of modernizing both of our classification yards here, which will include automatic switching and retardation and the changing of the classification yard gradient to 0.15% from 0.3%. When this has been accomplished we anticipate that we will have to depend on speed control out of the last retarder and the non-accelerating gradient in the classification yard to prevent damage to such fragile commodities as we are

talking about. To date we have not had any experience with the new facility since it is still under construction and therefore I am unable to predict exactly what will have to be done."—D. C. Hastings, superintendent, Potomac Yard.

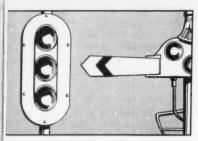
[Best wishes for the holidays to the contributors to and readers of this column—any success it's had is owing to you.—G.C.R.]

CONDUCTED by G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this columnums in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York 7.









# Reduce maintenance costs with aluminum signs!

MORE THAN 25,000 SETS OF KAISER ALUMINUM
CROSSBUCKS ORDERED TO DATE BY U. S. RAILROADS

Every day more and more railroads are switching to new and superior way signs made of standard Kaiser Aluminum sheet and extruded shapes.

These remarkable signs greatly reduce maintenance costs and reflect the high quality standards of the railroad industry.

**Longer Lasting!** Unlike steel or wood, aluminum signs never rust or rot—stay bright and attractive looking for years.

**High Strength!** They are designed to withstand winds up to 100 miles per hour.

Easy-To-Handle! An extruded crossbuck made of Kaiser Aluminum weighs only 10 to 15 pounds—as compared with old fashioned crossbucks weighing about 100 pounds.

Brighter, Safer! Aluminum signs make an excellent base for paint and are also ideal for use with "Scotchlite" Brand Reflective Sheeting, which many major railroads have adopted as a standard reflector. This combination of aluminum and reflective sheeting assures the utmost in rugged durability. And extra safety is assured because "Scotchlite" sheeting is up to 200 times brighter than the whitest painted sign under all weather conditions and at all angles.

Your local Kaiser Aluminum sales office will be happy to give you full information and fabricating assistance.

Aluminum signs are just one of the many ways that this strong, durable metal serves the railroad industry. New lightweight aluminum tank cars, passenger trains, locomotive components are other examples of the use of aluminum to reduce costs and increase profits for railroaders.

We are eager to work with you as "idea partners," offering you fabricating knowledge, engineering skill, cost analysis, design assistance. Call the Kaiser Aluminum sales office listed in your telephone directory. Kaiser Aluminum & Chemical Sales, Inc., General Sales Office, Palmolive Bldg., Chicago 11, Illinois; Executive Office, Kaiser Bldg., Oakland 12, California.



THE BRIGHT STAR OF METALS

SEE "MAVERICK" . SUNDAY EVENINGS, ABC-TV NETWORK . SEE YOUR LOCAL TV LISTING

# Rails and ICC Bumble Rate Issues

At least two conclusions are in order when one analyzes ICC handling of truckrail competitive rate cases over the past 20 years: the commission can take scant credit for displaying unusual insight in deciding such cases; the railroads have displayed even less skill in their own self-defense during this same period.

These findings are pointed up sharply in a new book,\* just published by Associate Professor Ernest W. Williams of Columbia's Graduate School of Business. Mr. Williams has examined all ICC cases having to do with this competitive struggle—and he suggests that truckers, during this whole time, appear to have looked after No. 1 with unrelenting vigor and ability.

Their record of traffic growth shows that their effort has been richly rewarded. And the country as a whole has suffered from a deterioration in the overall economy of transportation service.

The commission has been plenty active in this area. Mr. Williams cites some 475 different cases. The activity, however, has scarcely been that of a steersman piloting his boat steadily on a recognizable course. Critics of the anti-economic trend of ICC decisions will find all the supporting evidence they could possibly hope for.

But not all ICC decisions have been anti-economic. For example, there is the famous Petroleum Products from California to Arizona case, in which the ICC permitted railroads to establish lower rates (warranted by lower costs) than those of truckers. And the ICC justified its action by explaining that, to rule otherwise, "would be regulation in the interest of the high-cost agency rather than in the public interest."

Mr. Williams quotes Dudley Dillard as observing that "a rational economy cannot tolerate the misuse of resources which results from movement by motor carrier at costs of from 38 to 44 cents when the comparable rail cost ranges down to 14 cents." And yet, Mr. Williams cites decicision after decision in which the ICC violates this perfectly simple principle; and its own dictum in the *Arizona case*. In his polite academic language Mr. Williams observes:

"A study of some 900 cases is more revealing of what the commission has not done than of what it has done by way of establishing any definite economic principles of broad scope that fit into the several theories offered by students of the problem of intercarrier competition. . . .

"It has shied away from any clear interpretation of the national transportation policy. . . . The commission's concept of meeting competition through rate parity has left motor carriers in possession of advantages of lower minimum weights, lower costs to shippers for packaging, loading and unloading, and faster, more complete and flexible service. . . .

"Dispersion of traffic among the agencies of transportation is one of the major problems standing in the way of the development of more adequate, economical, and efficient transportation. . . The tendency to dispersion has not abated. If anything it has been enhanced in this postwar era. The commission has given it no express recognition. . . .

"The performance of the commission falls so far short of defining specifically and realizing the goals expressed in the declaration of policy [of the Interstate Commerce Act] as to suggest either that the declaration should be withdrawn or that it should be given more specific content by the Congress. And the commission has offered Congress little guidance for the improvement of the statute."

The railroads do not come off any better than the ICC does, in their dealing with this issue, in Mr. Williams' appraisal. He observes that:

"Trucks have not merely absorbed the growth factors in the small-lot and high-value traffic; they have diverted such traffic and become its preeminent carriers. The commission's exercise of its regulatory powers must bear a share of the responsibility, but the result has been shaped more, perhaps, by carrier policies than by any policies generated by the commission. . . . [The organized motor carriers] have had a policy—and a strong one at that. Meanwhile, if there has been any railroad policy, other than sheer expediency, we have been unable to detect it. . . .

"A legislative policy capable of giving the railroads adequate scope for the exercise of their inherent advantages—of which low cost for certain types of haul is undoubtedly the greatest—was allowed by default of the rail carriers, during the many opportunities open to them, to develop adversely until the weight of the decided cases has become a serious bar to reform. Nor are the railroads yet ready, as an industry, to take the initiative which is open to them under the law."

Whatever the political solution of the issue may ultimately be, the economic solution is simple. Says Mr. Williams:

"When the average fully allocated cost of the low-cost carrier is demonstrably below the out-of-pocket cost of the high-cost carrier, it is doubtful that intangible benefits to the particular shippers concerned would warrant keeping both types in business. The advantage of the low-cost carrier would seem to be of the type denominated by the act as 'inherent' which the commission is obligated to preserve."

# The Question: Rate or Service Competition

▶ "Witnesses for the motor carriers... maintain that effective and lasting competition could only be competition in service, cost to the shipper being equalized, so far as the carriers' charges are concerned, by a parity of rates.

➤ "Such a policy, of course, is highly dangerous to the railroad industry, which is, by nature, a mass producer of transportation whose principal advantage is an ability to generate large-tonnage movements at low cost. To suggest that it endeavor to meet motor carriers upon their own ground by trying to duplicate the flexibility and small scale of the motor carrier's operations is to suggest that it subvert its nature and consciously undertake to increase its unit costs..."

➤ "Service competition can only add to the unit cost of transportation and increase the expense to the nation of producing a given volume of ton-miles."

<sup>\*</sup>The Regulation of Rail-Motor Rate Competition, by Ernest W. Williams, Jr. Harper & Brothers, New York.

THE CONTINUING OUTRAGE 6156

ENGINEER, CONDUCTOR AND TRAIN-MAN are the minimum crew required by state laws for single-unit RDC's between Troy, N. Y., and Boston. These cars move over a private right-of-way, with all traffic carefully regulated by a trained dispatcher. The engineer is governed by signal indications, train orders and operating rules, which vary little from day to day. Needless to say, he does not "steer" his train through traffic. On this run, because costs far exceed revenue, the railroad has petitioned the New York PSC to drop passenger service.

# Why is there one law for trains ...



ONE-MAN FULL CREW, the driver for a competing bus service at Albany, N.Y., is a busy man. He is saddled with responsibility for passengers, tickets, consist, schedule, traffic and weather conditions. (He does get help with baggage at terminals.) At the wheel, he steers his vehicle over a right-of-way open to all comers, through all kinds of traffic, with little regulation other than traffic lights and posted speed limits. Bus line management predicts that buses will eventually get all the railroad passenger business.

... and another law for buses? PLEASE TURN >

Why is there one law for trains and another law for buses?

# Actually, there were <u>sixteen</u> 'full crew' laws for trains at the last count

Question: If Alabama, Illinois, Minnesota, Vermont (and 22 other states) can let their railroads decide for themselves how many men make a safe and efficient train crew, why do neighboring Mississippi, Indiana, Wisconsin, New York (and 12 other states) need "full" crew laws?

Answer: They don't. Again it's a question of leftover laws, still in the statute books long after any possible public need for them has passed.

An AAR tabulation of full crew laws and regulations (in effect as of 1953) lists 16 states that have and enforce full crew laws. In most of these states, any violation of these regulations is subject to fines, ranging from \$100 to \$1,000 for each offense.

Six states have given their public service commissions power to regulate crew size, but have not put such rules into effect. The other 26 states do not regulate the size of train crews.

Here's the breakdown:

Arizona.—4 men on passenger trains under 6 cars (except gasoline motor cars); 5 men on passenger trains over 6 cars; baggagemen additional; 5 men on freights under 40 cars; 6 men on freights over 40 cars; 3 men on light engine on road; 2 men on switching engine (on mountain divisions, a brakeman is required for every 600 tons).

Arkansas\*—6 men on freights of 25 cars or more; 5 men in passenger crew of 3 cars or more; 6 men in switch crew.

California.\*—4 men on passenger trains under 4 cars; 5 men over 4 cars; baggagemen additional; 5 or 6 men for freights; trains propelled by electricity or other than steam require only an electric motorman or power control man instead of an engineer and fireman; regulations do not apply to gasoline motor cars on branch line or to electric trains of less than 3 cars.

Indiana.—4 men on passenger trains under 5 cars (3 men under 4 cars if self-propelled

unit); 5 men on passenger trains of 5 cars or more with passengers or 10 cars or more without passengers; baggageman or express messengers additional; 5 men on freights under 70 cars; 6 men on freights over 70 cars; 5 men on any other train; 5 men in switching crew; 3 men on light locomotive.

Maine,—"No train of passenger cars, moved by steam, shall be run without one trusty and skillful brakeman to every 2 cars."

Massachusetts.—One brakeman for every 2 cars in a passenger train, and 1 for the last car of every freight train; all freights on main line, or on branch for 5 miles minimum, require 2 trainmen (where a trainman is required to protect the opposite track, 3 trainmen are required); all light engines operated for 10 miles or more require a trainman.

Mississippi.\*—5 men for passenger or freight or other train crews for steam operations; 3 men for trains with motive power other than steam under 3 cars; 4 men for 4 cars; 5 men for 5 or more cars.

Nebraska.—5 men for passenger operations of 6 or more cars; 4 men for passenger operations of 5 cars or less (excepting rail motor cars); 5 men for freight crews; 6 men for freight crews on main-line locals handling passengers, unloading en route, and switching; 3 men for light locomotives.

Nevada.\*—4 men on train of 2 cars or less (not applicable to light engines); 5 men on trains 3 to 50 cars; 6 men on trains over 50 cars

New York.\*—6 men on freights over 25 cars; 5 men on freights of 25 cars or less; 5 men on trains other than freight of 5 or more cars; baggageman additional; 3 men on light engine; both engineer and fireman or helper required on fuel-electric engine; 5 men in switch crew.

North Dakota.\*—6 men on freight and mixed trains of more than 40 cars; 5 men on freight and mixed trains of less than 40 cars; 5 men on passenger trains over 4 cars (baggagemen, express messengers, porters, and electricians additional as required); 3 men on light engine; conductor or pilot and one person qualified to do flagging on self-propelled machine.

Ohio.—4 men on passenger trains of 5 cars or less; 5 men on larger passenger trains; baggageman or express agent additional (electric operations excepted); 5 men in switching crew; 5 men in through freight crews on main line; 3 men on light engines (for movements over 3 miles).

Oregon.—5 men on passenger trains of 4 or more cars; baggageman or express messenger extra; 6 men on freights of 40 or more cars and main-line locals; applies to trains operating over 15 continuous miles; 3 men on light engines (except helpers).

Texas.\*—4 men on passenger crew; 5 men on freight, gravel, or construction train; 3 men on light engine.

Washington.\*—5 men on passenger train of 4 or more cars; baggageman or express messenger additional; 6 men on freight train of 25 or more cars; 3 men on light engine.

Wisconsin.—4 men on 3-unit or less passenger trains; additional brakeman on trains of more than 3 cars; baggagemaster or express agent additional (not applicable to trains propelled by electricity); 5 men on freights of 3 or more cars outside yard limit; 3 men on light engine; 5 men in switching

\*States noted make exceptions for railroads or branch lines that are under a certain minimum length or do not operate more than a specified number of trains daily.

# These States Don't Regulate Crews

In six additional states, public utility commissions have authority to regulate train crews but don't exercise it. One of these, Connecticut, investigated crew policies in 1911 when this kind of regulation was thought by many legislators to be necessary. The Connecticut commission decided that "the railroad companies are familiar with the requirements and are vitally interested in the sufficient manning and successful movement

of freight trains, which would entitle them to some discretion as to the number of trainmen employed on different trains and in different locations."

Maryland, New Jersey, Pennsylvania, Rhode Island, and West Virginia also have laws giving power to public service commissions to regulate the size of train crews, but none of these states has issued full crew regulations.



POWER SWITCH machines and signals at sidings save train time.

HIGHWAY TYPE trucks now run where second main track was before.



# CTC PAYS OFF AS MAINE CENTRAL

# Single Tracks-Slashes Costs

On 24 miles of road between Pittsfield and Hermon Pond, the Maine Central has changed from two main tracks to one, securing adequate capacity on the single track by installing centralized traffic control, including power switches and signals.

This section is part of the main route between Portland and Bangor, Hermon Pond being 3.8 miles west of the freight yards at Northern Maine Junction, near Bangor. The traffic on this route includes 12 passenger trains daily. Freights range from about 8 daily in summer to 18 in winter. This same traffic is being handled on existing single track west of Pittsfield.

When making the change-over from double-track to single main track, portions of the previous second main were left in place for use as passing tracks at Pittsfield, Stetson, and Dabscook. These passing tracks total 6.4 miles, so 17.6 miles of second main track was actually taken up.

This rail has been or will be relaid in branch line territory or sold. Its market value is at least \$75 per gross ton. Also 43,434 treated crossties, suitable for reuse, were salvaged at \$2 each. In the previous double-track layout there was a center passing track 3,627 ft long at Hermon Pond which was removed as part of this

project. Also, six crossovers between the previous main tracks were removed.

The 100-lb ARA-A rail in the two main-line tracks was in such condition that the railroad was faced with the prospects of having to replace it in 24 miles of the westward track and 7.8 miles of the eastward track. The remaining 14.2 miles in the eastward track, consisting of 112-lb RE rail laid in 1940-41-44, was considered good for many years. In conversion to single track, the track having this 112-lb rail was utilized, eliminating the immediate necessity of laying rail in 24 miles of track at an estimated cost of over \$500.000.

Considering tonnage, as well as other factors in rail life, it was concluded that the 112-lb rail had a remaining service life of at least 15 years in its present location, functioning as a single main line track. By avoiding relaying 24 miles of rail the railroad is realizing the equivalent of \$30,000 a year saving.

### **Expense for Ties and Ballast**

Experience on the Maine Central indicated that for the tonnage now hauled, or in prospect, the ties in the single track left in service would last as long as they would have if double-track operations had been

# HERE'S WHERE THE ROAD SAVES

- ► \$30,000 each year on rail
- ► \$8,448 each year on ties
- ► \$13,000 each year on ballast
- ► \$50,000 each year on labor
- ► An average of \$4,235 per mile

Overall savings represents 32 per cent return annually on net expenditure for the entire project.

continued. In this territory the average charge for tie renewals, material only, at \$4 each, is \$480 per mile of main track annually. For the 17.6 fewer net miles of track, this totals \$8,448 saved annually.

The ballast in this territory is a good grade of washed gravel, which is resurfaced about every 20 years at an estimated average cost of \$11,000 per mile. Applying this figure for the entire 24 miles of second main track eliminated, gives an average saving of \$13,200 annually for ballast.

Reduction in mileage of track to be maintained permitted changes in track forces that make a wage saving of over \$50,000 per year.

The project was completed January 9, 1957, and the saving this year—\$30,000 for rail, \$8,448 for ties, \$13,200 for ballast, and \$50,000 for track labor—totals over \$101,000. This saving is anticipated annually.

In all sections where the second main track was removed, a Jordan spreader was used to level out the ballast, thus forming a smooth roadway for trucks and other rubber-tired highway vehicles. Existing local highways cross the track at grade, thus permitting railroad highway trucks to get to or from the new access road along the track.

### 32% Return

The previous double-track was equipped with color-light automatic block signals for right-hand running, with blocks about 1.5 miles long, a total of 35 automatic signals being involved. These signals were removed. In the new arrangement, centralized traffic control, including power switch machines and signals, was installed on the 27.7 miles of single track between Pittsfield and MD Tower, which is at the west end of the Northern Maine Jct freight yard.

The gross cost for signal and telephone materials, and labor for installation, was approximately \$493,000, less about \$5,100 for salvage. The signal maintainer territories are the same as for the automatic block.

Considering the track work and signaling, the entire project involved a gross cost of about \$660,000. Retirements were \$336,000 and salvage \$341,000. The sav-

# How does your ad budget compare?

Final road - by - road figures have just been compiled on 1956 advertising outlays by railroads. The summary is for gross billings only and does not include earned discounts, production, art and talent charges.

Railroads spent \$15 million for advertising in 1956—\$7 million in newspapers, \$6.4 million in magazines, \$691,300 for TV, \$458,000 for outdoor ads and \$373,900 in other media. (Airlines, by comparison, put \$21.6 million in newspapers alone.)

**Developments** during 1957 indicate that advertising this year is running close to 1956 levels.

Summary of Railroad Advertising-1956

Chart is reproduced on page 25

For one thing, the AAR embarked on a big magazine campaign, using two-page, full-color spreads, to promote fair play in transportation. Selling passenger service continues as a major ad effort on many roads.

Here's the picture on who spent how much in 1956 (see page 25)

w b

ings represent a return of about 32 per cent annually on the net expenditure.

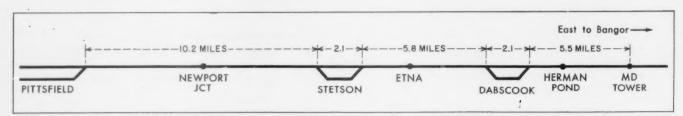
### Siding-to-Siding Blocks

When planning this project, a study showed that instances in which trains followed one another at less than 10 to 15 miles would be rare. Therefore, to reduce the number of signals, and to simplify controls, the blocks for both following and opposing trains are from siding to siding, with no intermediate signals, as such, except between Pittsfield and Stetson siding.

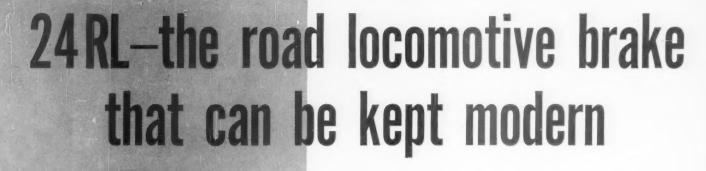
Absolute stop holding signals, controlled from the CTC machine, are located at yard limit west of Pittsfield. This permits switching to be continued a maximum time in this area while, in the meantime, a through train can be advanced without delay from the next siding to the holding signal.

The switch machines are equipped with 110-volt motors to provide greater power for crushing ice, coal or other objects that otherwise might obstruct a switch and thereby prevent proper operation. Also, operation is faster. Each of the power switches is equipped with a propane-gas snow-melter switch heater. These heaters are turned on and off by control from the CTC control machine. The heaters, including devices to ignite the gas, were furnished by the Rails Company.

This project was planned and constructed by Maine Central forces under the jurisdiction of J. W. Wiggins, chief engineer, the signaling being under the supervision of J. F. Stanford, signal engineer, and the track changes under C. D. Prentice, engineer of track. The major items of signal equipment were furnished by the General Railway Signal Company.



SECTIONS of the second main were left in place as three sidings.



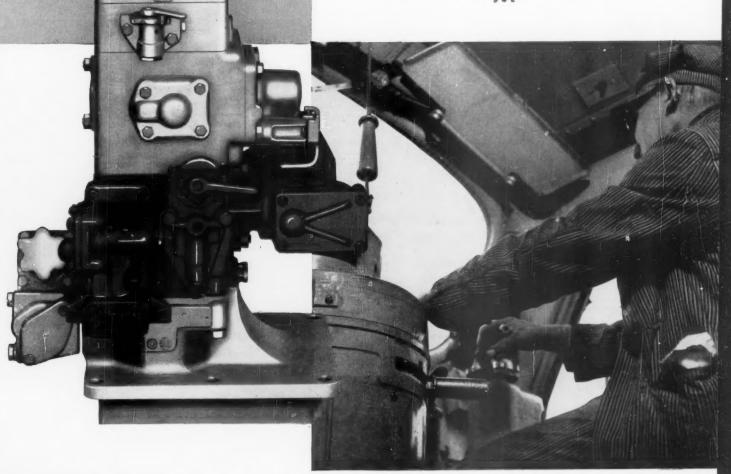
Sectional construction, as followed in the 24 RL Brake Valves, provides for the addition of new or improved functions merely by the substitution of sections. The advantage, of course, is that the brake equipment can be kept modern with minimum investment as compared to entire brake valve replacement.

The most recent improvement that can be provided in this manner is the brake pipe pressure maintaining feature, which offers pronounced improvement in train brake operation plus outstanding maintenance economies that develop from uniform distribution of braking pressure throughout the train.

This feature can be incorporated in any D-24 Type Brake Valve now in service by replacing the existing Filling Piece Portion with the Conversion Filling Piece shown in color in the illustration. Write for our Circular Notice No. 1130 which gives complete details.

# Westinghouse Air Brake

AIR BRAKE DIVISION 6 WILMERDING, PENNA.







First units in the M. St. L. plan were the six oldest freight locomotives replaced with six General Purpose units. Subsequently, the second oldest group, consisting of freight units (like the one at left) has been turned in for versatile General Purpose units. Above are two of the General Purpose locomotives at work on the railroad today.



# New locomotives for old . . .

The Minneapolis & St. Louis is building a new future from old freight locomotives by turning them in for <a href="new General Purpose">new General Purpose</a> locomotives containing certain remanufactured components. The advantages of higher horsepower and greater versatility are obtained at a cost substantially less than that of completely new units. Year by year, the M. St. L. plans to continue this program with additional older units as they too reach maturity.

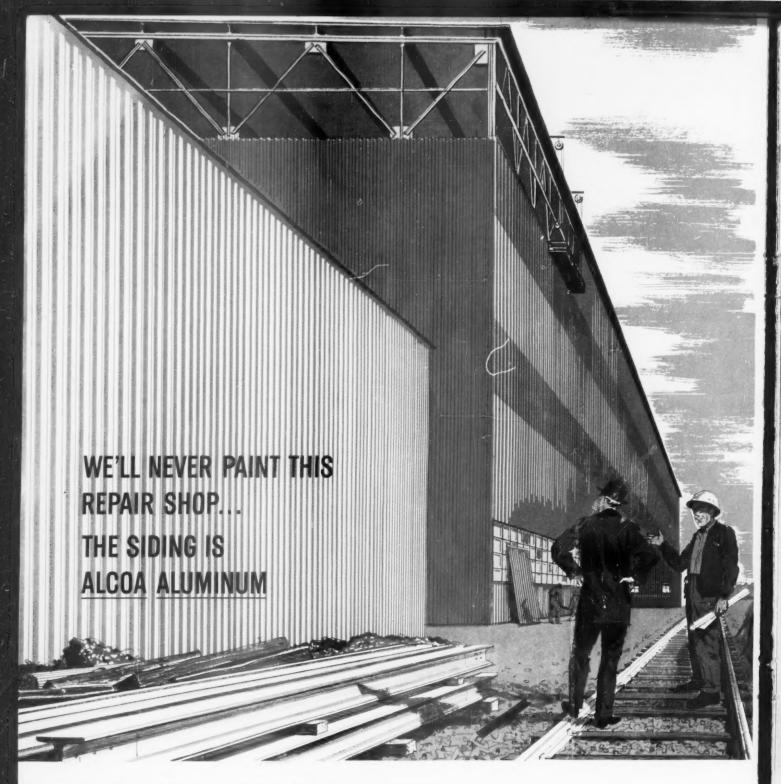
How this or similar plans might benefit your roads' future can be had in detail from your Electro-Motive representative.



# ELECTRO-MOTIVE DIVISION GENERAL MOTORS

LAGRANGE, ILLINOIS . HOME OF THE DIESEL LOCOMOTIVE

In Canada: General Motors Diesel Limited, London, Ontario



Alcoa® Aluminum was selected for Erie Railroad's new Meadville, Pennsylvania, car repair shop after engineers took a close look at costs. When they made comparisons with galvanized and stainless steel, they found first cost was lower with aluminum.

Aluminum's resistance to smoke, fumes and grime guarantees many years of maintenance-free service. It won't rust, rot or warp. Protective painting will never be needed. The embossed surface of the siding gives it natural attractiveness.

Where Erie required extra insulation—in machine shop, lumber mill, paint shop and storeroom—aluminum sandwich wall filled the bill. Its glass fiber core will keep these rooms dryer—easier and cheaper to heat and cool. And rustfree aluminum gutters, downspouts, sash, copings and gravel stops will save Erie many more dollars in upkeep.

Progressive railroaders are using more and more light, strong, rustfree Alcoa Aluminum—for new lightweight trains, tank cars, boxcar and baggage-car doors, crossbucks and wayside signs, freight and passenger stations. Get more information from your Alcoa distributor or nearest Alcoa sales office. Or write Aluminum Company of America, 2180-Z Alcoa Building, Pittsburgh 19, Pennsylvania.

YOUR GUIDE TO THE BEST IN ALUMINUM VALUE







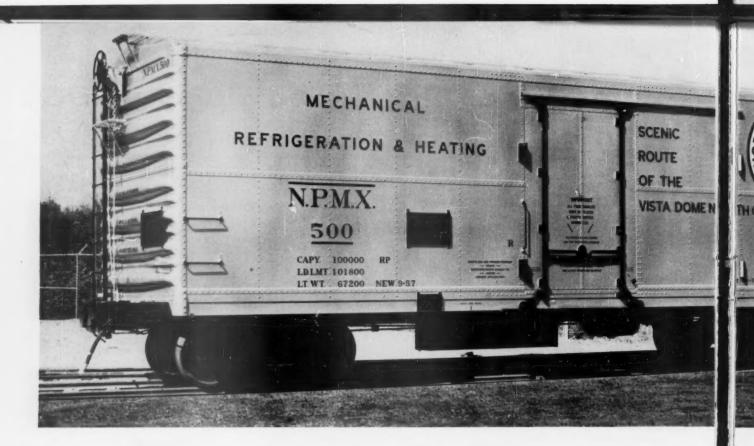
# Summary of Railroad Advertising-1956

* 3	Total Ex	penditures	News-	Spot(2)				Mag	azine Adv	ertising	
Carrier	1956	1955		Television	Outdoor	Other	Total		Freight	Industrial	General
Santa Fe	\$1,204,000	\$1,369,800	\$475,000	\$133,700	\$132,900	\$14,300	\$448,100	\$446,800	*****	\$ 1,300	*****
Atlantic Coast Line	374,000	336,800	370,900	******	*****	3,100		*****	*****	******	HILLER
Baltimore & Ohio	696,200	530,400	289,300		*****	62,400	344,500	21,100	\$121,200	160,100	\$ 42,100
Boston & Maine	66,200	55,600	66,200	*****	******	*****		*****	******	*****	*****
Canadian National	437,100	417,600	341,900	******		4,500	90,700	90,700	*****	*****	*****
Canadian Pacific	689,600	762,000	318,300		*****	*****	371,300	371,300	*****	******	* ******
Central of Georgia	37,000	31,800		*****	*****	9,200	27,800	*****	inn	27,800	
Chesapeake & Ohio	684,800	170,400	167,400		*****	32,600	484,800	42,500(3)	37,700	68,300	336,300
C&EI		1,200		*****	*****	******		*****	*****	*****	*****
North Western		98,300		,,,,,,	*****			,,,,,,	*****		*****
Burlington	375,500	253,600	240,000		23,200	5,300	107,000	87,400	19,600	*****	*****
Milwaukee	332,800	484,800	240,200	410000	*****	******	92,600	59,200	18,800	*****	14,600
Rock Island	235,100	199,200	148,300	******	*****	7,700	79,100	71,900	7,200	*****	
Delaware & Hudson	25,300		25,300					*****	*****	*****	*****
Lackawanna	92,800	39,200	44,000		*****	11,500	37,300	24444	11,200	26,100	*****
Rio Grande	30,100	*****	30,100	444144	*****	*****		*****	· · · · · · ·	*****	*****
Erie	234,500	221,100	38,200	*****	*****	7,900	188,400	******	109,900	61,400	17,100
Great Northern	672,600	507,600	270,600	195,200	*****	12,600	194,200	96,400	30,900	*****	66,800
Gulf, Mobile & Ohio	400	*****		*****	*****	400		*****	F74144	*****	******
Illinois Central	254,700	211,500	249,000	*****	******	5,700				274816	*****
Kansas City Southern	48,600	45,400	48,600	*****	*****	******		******	*****	** ***	*****
Louisville & Nashville	84,000	170,800	84,000	*****	*****	*****	******	*****	*****	*****	
Missouri-Kansas-Texas	700	28,700	******	*****	*****	700	111111		10.700	01 000	00 400
Missouri Pacific	268,900	212,000	51,800	*****	66,900	5,700	144,500	15,900	18,700	21,300	88,600
NC&St.L	*****	15,800		147741	*****	******	544946	*	*****	*****	******
New York Central	1,570,900	1,059,000	1,284,200	85,600	27,300	43,200	130,600	18,200	61,800	5,300	45,300
NYC&St.L	73,400	58,900			*****	6,000	67,400	>+++++	43,000	24,400	*****
New Haven	68,700	202,500	66,200			2,500	*****	******	*****	*****	*****
Norfolk & Western	421,000	361,200	156,300	*****	*****	35,800	228,900	*****	8,800	159,400	60,700
Northern Pacific	384,300	377,100	111,800	74,000	*****		198,500	198,500		*****	*****
						10 500	42.000		5,100	56,900	
Pennsylvania	263,900	204,500	191,400	*****	*****	10,500	62,000	*****			*****
PRR-Reading Shore Line		*****	*****	******	*****	3,300	62 200	*****	48,500	4,700	*****
Reading	59,300	*****	*****	******		6,100	53,200	******			*****
St. Louis-San Francisco	65,700	98,200	*****	*****	65,700			F4446X	*****	*****	******
St. Louis Southwestern		1,800	*****	******	******	******		******	*****		
Seaboard	186,300	179,000	179,600		*****	6,700		******	*****	*****	,
Southern	376,400	370,600	175,200	*****	*****	24,700	176,500	******	33,500	143,000	******
Southern Pacific	710,300	730,800	288,800	33,400	66,300	7,900	373,900	76,300	139,600	*****	158,000
Texas & Pacific	71,700	41,600	27,500		41,800	2,400		*****	*****	******	*****
Union Pacific	1,698,500	1,311,000	804,000	137,800	33,900	27,700	695,100	487,200(4)	114,800(5)	59,500	33,600
Mr. E L	222 500	115 500	84,700	31,600		5,300	111,900	18,500	56,000	18,900	18,500
Wabash	233,500	115,500			*****	8,200	58,700		56,200	2,500	
Western Maryland Western Pacific	66,900 255,600	62,200 212,300	65,400	*****	*****	8,200	190,200	102,700	83,100	4,400	*****
vvestern Facific	233,000	212,300	03,400		******		,				
AAR	522,300	. 465,200		******	*****	*****	522,300	******	*****	*****	522,300
California Zephyr	41,800	81,500	*****	******	*****	******	41,800	41,800	*****	*****	****
ERPC	93,600	322,900	93,600	*****	*****	*****	*****		******	*****	*****
Pullman	509,400	510,700		*****	*****		509,400	509,400		*****	*****
Railway Express	463,700	522,500	*****		******	*****	463,700	900076	463,700	*****	*****

NOTES: (1) Expenditures of over \$25,000.
(2) Spot television for 1955 not available.
(3) Greenbrier Hotel only.
(4) Train service only.
(5) Sun Valley, Idaho resort.

STATISTICAL SOURCES: Newspaper advertising Media Records, Inc.

Media Records, Inc.
Spot television
Television Advertising Bureau, Inc.
Magazine advertising
Leading National Advertisers, Inc.
Outdoor advertising
Leading National Advertisers, Inc.



# What's New About

A new 50-ton, 40-ft mechanical refrigerator car, recently completed by the Pacific Car & Foundry Co., Renton, Wash., is now leased to the Northern Pacific for thorough testing in line-haul service. This all-purpose car is designed for transporting either high- or low-temperature loads. Its 2,530 cu ft capacity is expected by the builder to prove the optimum size for most shipments of perishable commodities.

The car is unusual for its lining and method of insulation. The builder is an experienced user of plywood. It turns out up to 10 or 12 ice cars a day at Renton shops, many of which are lined with exterior-type fir plywood. However, the lining in the new experimental car is something different.

In appearance it is a smooth, hard, gleaming white surface called Compolay. The surface is achieved by fusing a Fiberglas plastic overlay to the face of a conventional panel of fir plywood. Thus, the plastic surface becomes an integral part of the plywood panel.

### Plywood Lining

The new car lining material is produced by Northwest Plastics Industries, Inc., Seattle, Wash. It is said to combine the structural strength and impact resistance of fir plywood with a smooth, tough, plastic surface which makes for easy cleaning since it covers the wood grain and prevents the dirt accumulation associated with untreated wood surfaces. The lining comprises 4-ft by 8-ft panels of ½-in. fir plywood faced with Compolay. One-inch thick Compolay-faced fir plywood is used for end linings.

### **Early Tests**

In a recent test of the new car, its direct-connected diesel-driven refrigeration unit brought the car temperature from 75 deg F to —5 deg F in 3 hr 45 min. In early October, the car was loaded on the NP near Seattle, with 25 tons of frozen vegetables for a run to Philadelphia. Two railroad representatives and two engineers from the car builder accompanied the new car on its trip across country.

On this haul, the car's high-capacity refrigeration unit reportedly turned in a highly satisfactory performance. Inside temperature was minus two as it left the coast. Before arriving at St. Paul, the temperature was down to minus 20. Plans are also being made to test the car with a "hot" load in the near future.

The builder's engineering department undertook to develop a reliable, low-cost, all-purpose mechanical car. The design, a result of two years of field research, stresses simplicity of all parts to make the most functional unit possible. The builder believes the 40-ft, 2,530-cu ft capacity car will prove to be the most practical and economical size for transportation of frozen commodities.

### **Construction Details**

The center sill of the car is enclosed, and functions as a fuel tank to hold diesel fuel for the refrigeration unit. Thus the otherwise waste space formed by the sill has been put to good use for what is believed to be the first time.

The car's exterior is of .10 CBS steel sheets applied horizontally. Between the steel exterior and the ½-in. Compolay-faced fir-plywood side lining are 7 in. of Ultralite insulation, two layers of Lumicote barrier paper, a ¼-in. thick fir plywood sublining, and a 1-5/16 in. air space.

The ¼-in. thick plywood sublining is nailed to fir nailer strips and belt rails. The ½-in. Compolay-faced plywood lining is applied vertically with screws into nailer strips. Screws in the Compolay are countersunk and covered.

The car's floor has a 6-in. layer of Styrofoam insulation over the bottom steel plate. The Styrofoam is covered with a 1-34-in. thick layer of sandalwood. Floor racks built up from aluminum stringers



# This Car?

and oak slats hinge up for easy cleaning.

The ceiling of the car is conventional ½ in. exterior-type fir plywood which holds a 10-in. layer of Ultralite insulation in place. The inner shell of the doors is Fiberglas-reinforced plastic and the doors are insulated with Ultralite.

### Car Equipment

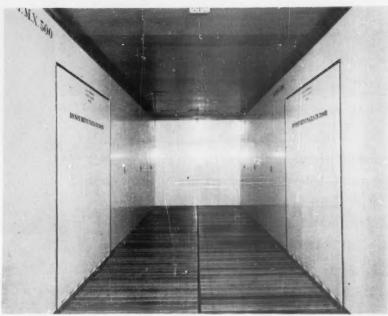
The refrigeration unit is equipped with a Carrier reciprocating compressor and an evaporator coil with 1,200 sq ft of area. Other features of the car are 5½-in. by 10-in. Bethlehem steel axles, Hyatt roller bearings, Buckeye 50-ton truck bolsters, double extruded Neoprene door seals, New York air brakes, Miner hand brakes, Apex Boxweld brake beams, and Buckeye cast steel rotary couplers. Miner 4¾-in. travel draft gears were specified for longer travel under impact.

The car interior dimensions are as follows: 8 ft 6 in. width between side walls; 9 ft 1½ in. floor to ceiling (minus 5% in. for floor racks); and 34 ft 3½ in. between end linings.

The car designers expect the new plywood-plastic lining to prolong the life of the car. They point out that slight modifications may be made in production units of the car after the prototype has been thoroughly tested.

# Prototype on test has:

- Plastic-faced lining
- 1,200 sq ft evaporator coil
- 2,530 cu ft capacity
- Center sill serving as fuel tank



FIR PLYWOOD lining with Compolay Fiberglas-plastic overlay.



OAK AND ALUMINUM floor racks in raised position for easy cleaning.

SEVEN AND A HALF TONS of dynamite were set off in the Cran River valley to move 30,000 cu yd of rock.

TOUGHEST BRIDGE job was the Bell River crossing. It is the first cantilevered bridge to be built by the CNR.



Blasting through the north woods the CNR overcame sub-zero weather, heavy snow and unprecedented engineering problems to open up a new line. . . .



# Now Industry Can Tap a Rich

In this day of advanced technology, man's quest for mineral resources is constantly being intensified. Mineral "finds" are drawing new railroads into the hitherto inaccessible wilds of northern Canada. One of the latest such ventures is the Canadian National's new 294-mile line into the rich mining region around Lake Chibougamau in northern Quebec.

The Beattyville to Chibougamau leg of the new line was opened last month. The remaining 133 miles from Chibougamau to St. Felicien is under construction and is expected to be opened by the end of next year.

### Started in '53

The significance of the new line, says CNR President Donald Gordon, is that, "in a country such as ours, where distance is a determining factor in the cost of goods, no one can possibly think of the development of natural resources without the railways coming to mind. Cheap transportation is a vital prerequisite of mining de-

velopment. . . . One immediate effect of the completion of this branch line will be a reduction in transportation costs and, consequently, an increase in workable ore reserves."

Preliminary survey work on the Chibougamau line was begun by CNR engineers in 1953, following an appraisal of the region's natural resources. Chibougamau's ore reserves have been estimated at 10 million tons and the lumber potential in the immediate area of the Beattyville—Chibougamau line at 30 million cords. Chief mineral deposits are copper, gold and silver with the prospects for iron ore development extremely promising.

Construction began in November 1954 when the road awarded the first two contracts for clearing, grading and other work. By April 1955 work on the project was well advanced and three-quarters of the clearing operation between Beattyville and Bachelor Lake had been completed. Grading at this time was approximately 25 per cent finished. On the section of line between Bachelor Lake and Chibougamau,

however, work had proceeded more slowly, hampered by heavy snow.

By the fall of 1955 the line had been almost completely cleared and grading work was well advanced. Bridge construction was running ahead of schedule and the major bridge construction problem—spanning the Bell river—had been overcome (Railway Age, Dec. 19, 1955).

In the spring of '56, work on eight of the 10 bridges was virtually completed, and grading had been finished between Beattyville and Bachelor Lake. By fall, rail had been laid to Mile 108 north of Beattyville.

### **Construction Problems Licked**

The going was not easy, however. Many of the construction problems met on the line were without engineering precedent and called for a considerable degree of improvisation. During the winter, temperatures as low as 63 deg below zero were recorded. In the summer, temperatures soared into the 90's and the Northland's



# Mining Area

most vicious insect, the black fly, made life miserable for the construction forces. Time after time stretches of newly laid track would disappear without trace into the muskeg. Nevertheless, work continued on a year 'round basis.

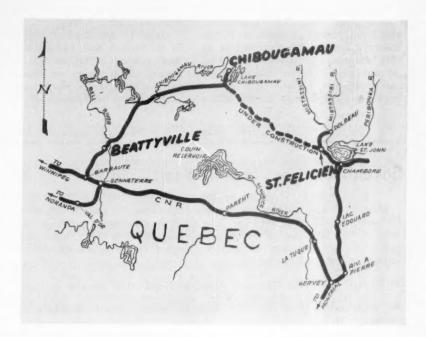
In March of this year the first ore train moved over the new line. But considerable consolidation work had to be done before the line could be opened for full-scale operation. The spring breakup had caused considerable damage. Excessive frost heaving necessitated heavy ballast lifts, and, in muskeg areas, heavy settlement of the track had to be rectified.

In October the line was inspected and approved for both freight and passenger traffic. Today the town of Chibougamau boasts a population of over 3,500—and it is growing by the day. Three mines are in production and ore-laden trains are regularly carrying their cargo to smelters in Ontario. Train service has been established on a regular three-trains-per-week basis in either direction.

(Continued on next page)



WINTER TEMPERATURES fell to 63 deg below zero, but construction work went on to complete this line.



### What's in a Name?

There'll be some 20 stations on the line between Beattyville and Chibougamau. Their names range in origin from the personally commemorative to the historical and geographical. Chibougamau, Opemiska and Waswanipi are Indian names meaning, respectively, quiet place, elevated place, and the water where they fish with torches.

Miquelon, Desmaraisville and Chapais have been named after notables in and out of government, and Marin, Val Piche and Coribelle commemorate CNR personnel who worked on the new line. Beattyville, the starting point of the new railway, commemorates the work of a former CNR construction engineer.

Lakes and rivers in the region have lent their names to the stations of Cuvillier, Lac Burge, Opawica, Relique and Gwillim. Townships, also, are represented by the Quevillon, Grevet, Anville, Daubree and Faribault stations. Goeland, which completes the roster, is a French version of Kiask or Gull Island, and is a local landmark.





BLASTED ROCK was picked up by power shovel and loaded into trucks for disposal.

RAIL ON NEW LINE is all partly worn 80- to 85-lb section. All rail was laid by Burro crane.

(Continued from preceding page)

While clearing, grading and some other work were contracted, all field engineering, track laying, ballasting and erection of steel bridges was and is being carried out by CNR district and division forces under the supervision of Robert Oldham, branch line construction engineer. Rail on the new line is partly worn 80- to 85-lb section

laid on treated crossties. Maximum grade on the new line is 1.25 per cent and maximum curvature is 4 deg.

On the 133-mile line from Chibougamau to St. Felicien now under construction, there will be 14 bridges—12 depressed plate girder structures, one through truss and one wood trestle. (As if construction problems on this portion of the line

weren't enough, CNR engineers have to wrestle with the spelling of such tonguetwisters as the Ashuapmuchuam river.)

### Region Rich in Minerals

The Lake Chibougamau region has been recognized for more than 50 years as a great base-metal producing area. Until the recently completed branch line was extended into the region, however, bush pilots provided the only means of reaching the area short of a long canoeing and portaging expedition. This isolation precluded any commercial exploitation of the region's rich copper, zinc, gold, silver and cobalt-bearing ores. Since the CNR announced that it would build a new line into this mineral-rich area, three mining companies have been brought into production.

One such firm, Campbell Chibougamau Mines, has been mining ore from a leased portion of the Merrill Island Mining Corporation property. The latter company, itself, is building a 750-ton capacity mill scheduled for completion at an early date. Of the many other properties in the Chibougamau area, Copper Rand Chibougamau, Ltd., plans to complete a mill next year. The first property in the region to achieve production was Opemiska Copper Mines which began milling in 1953. Some of the ore bodies under development by this company are said to be among the highest-grade deposits of copper in Canada. Present operations amounting to about 800 tons of ore per day will, it is reported. be substantially increased in the near future.

# Seven New Lines in Nine Years

Including the as yet uncompleted portion of the Beattyville-Chibougamau-St. Felicien line, the CNR has achieved an imposing total of over 600 miles of new line construction since 1949. This multimillion-dollar extension of service, largely to Canada's expanding mining industry, includes the:

- ▶ 39-mile line from Barraute, Que., to Beattyville, opened in 1949;
- ▶ 144-mile line from Sherridon to Lynn Lake in Northern Manitoba, opened in 1953;
- ▶ 46-mile line between Terrace, B. C., and Kitimat, opened in 1955;
- ▶ 27-mile line between Hillsport, Ont., and Lake Manitouwadge, opened in 1955;
- ▶ 32-mile line from Sipiwesk on the Hudson Bay Railway to Moak Lake, Man., opened in 1957;
- ▶ 22-mile line from Bartibog, N.B., to the Heath Steele Mines, opened in 1957; and the
- ▶ 294-mile line from Beattyville to Chibougamau to St. Felicien, the 161-mile portion of which from Beattyville to Chibougamau has just been opened.

# REVENUES AND EXPENSES OF RAILWAYS

(Dollar Agures are stated in thousands; i.e., with last three digits omitted)
MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1957

	Average mileage operated during period	Freight	Operating R Pass.	-0-	c. misc.)	Total 1957	Maint. Wa Total 1956	y and Str Deprec. and Retire- ments		Maint. Total 1956	Equipme Deprec. and Retire- ments		Trans-	Total 1957	Total 1956	Operation ratio	Net from railway 956 operation	E 6	tax ccruals	Net Rail opera incom 1957	t Railway operating ncome 17
Akron, Canton & Youngstown Oct. Atchison, Topeka & Santa Fe. Oct. 10 mos. Atlanta & St. Andrews Bay. Oct. 10 mos.	13,172 13,172 13,172 81	\$571 5,418 428,233 428,233 3,781	35,452	\$585 53,677 50,485 3,817	\$552 5,014 52,323 489,970 3,680	882 733 8,119 75,671 414	\$71 72,581 47 439	33 33 33	\$74 724 10,800 105,486 296	\$62 627 9,423 94,542 308	\$15 144 22,259 22,238 68	\$44 457 1,449 13,013	\$173 1,648 18,158 175,482 67 695	4,038 40,993 193,329 1,679	\$374 3,723 37,670 368,313 1,735	27.7.7.4 27.7.7.4 27.7.7.4 27.7.4 37.7.4 37.7.4 37.7.4	67.8 8 74.3 1.77.0 12.75.2 113.	160 520 084 157 1222 138	878 751 5,835 1,129 970	\$46 4.862 5.783 778	568 411 7.018 55.704 736
Atlanta & West Point 10 mos.  Western Ry. of Alabama 0ct. Atlantic Coast Line 0ct.	93 133 133 5,292 5,292	2,353 2,353 294 2,739 11,376	288 288 262 262 890 14,745	3,176 3,176 3,363 13,144 136,561	3,373 3,373 3,484 13,254 139,057	47 439 61 514 1,998 20,417	455 455 61 2,169 24,612	989 192 17.1	610 610 61 634 3,175 29,678	666 646 72 704 2.954 30,329	144 187 187 6,578	173 193 193 4,617	1,472 1,472 1,494 4,999 53,808	2,900 302 302 2,969 11,239 115,239	305 2,964 313 2,967 11,408 119,505	911.0 865.1.0 865.1.0 845.3 865.3 865.3 865.3 865.3 865.3 865.3 865.3 865.3 865.3 86	56.22	29 49 394 905	199 37 339 1.175 3,975	23 23 231 553 7.895	22 22 36 298 582 7,529
Charleston & West. Carolina Oct.  Baltimore & Ohio 10 mos.  Staten Island Rapid Transit Oct. 10 mos.	343 6,005 6,006 29	598 37,314 351,601 2,062	1,326 15,699 65 635	5,950 41,292 391,066 2,745	6,180 40,974 386,528 282 2,557	1,402 4,519 44,777 59 583	1,445 5,015 42,744 54	4,172 4,172 118	986 7.398 72,662 38 360	1,102 7,793 80,394 294	28 276 1,092 10,799 18	1,037 10,498 10,498	192 1,810 16,641 164,053 1,511	454 4,569 31,697 312,653 2,866	4,673 32,110 311,054 2,532	74.5 76.8 76.8 776.8 776.8 776.8 776.8 776.8 776.8 776.8	9.83.83.99 9.44.89.99 4.9.80	155 381 595 413 21	100 865 3,240 8,448 44 437	82 699 2,966 2,966 859	79 767 4,905 35,910 647
Bangor & Aroostook 10 mos. Bessemer & Lake Erie 0ct. Boston & Maine 10 mos.	602 602 208 208 1,571 1,571	885 12,251 25,708 25,960 5,917 55,849	2777 8,571	950 12,932 2,843 25,826 7,488 72,163	869 13,309 3,671 22,000 7,624 73,498	2,627 2,527 2,322 1,068	2,745 194 2,610 978 10,046	216 216 177 177 160 1,570	2,673 2,673 6,738 813 8,945	2,566 7,617 1,036 9,507	1,040 1,040 1,390 1,607	332 42 42 373 164 1,542	3,771 5,269 3,269 32,895	853 10,362 1,952 16,115 5,674 57,520	868 9.963 1.602 16,189 5.878 58,134	89.8 79.7 68.7 75.8 79.7	9.9 3.6 9.1 9.1 1.1 1.4	97 891 9,711 1,814 4,643	94 1,301 734 7,499 4,810	2,521 6,516 6,516 4,875	193 3,105 4,988 6,98 4,843
Canadian Pacific Lines in Me. Oct.  10 mos.  Carolina & Northwestern Oct.  Central of Georgia Oct.  10 mos.	234 234 284 284 1.763	298 5,198 310 2,967 3,512 32,761	531 5.501 1.501	376 6,012 3,029 3,852 36,853	6,071 8339 3,287 3,895 37,426	1,202 572 572 560 5,448	1,200 5,84 638 667 5,834	158 17 70 70 56 495	1.022 21 199 623 6,254	1,175 1,175 181 670 6,096	173 173 107 173 1,645	91 4 4 1,730	2,244 93 788 1,509 14,646	397 4,760 184 1,729 3,039 29,925	379 5,027 1,779 3,081 29,856	105.7 79.2 87.4 44.5 57.1 81.2	7.88.49.9 7.89.49.9	1,282 1,382 1,300 813 6,928	30 312 31 273 261 2,541	99 384 42 532 507 4,252	186 186 685 464 4,444
Central of New Jersey 10 mos. Central Vermont 10 mos. Chesspeake & Ohio 10 mos.	612 612 383 383 5,132 5,132	41,389 41,539 775 8,343 36,665 339,926	5,318 5,318 54 613 529 6,054	5,339 50,249 915 9,671 39,340 366,260	5,637 51,735 1,697 9,886 39,227 349,136	5,826 178 2,730 4,533	835 6,949 300 2,198 4,589 39,422	93 930 119 172 455 4,380	8.893 8.893 1112 1113 6.287 89,755	940 9,003 77 1,077 6,267 87,129	1.797 1.797 1.870 17,840	80 786 181 181 867 8,096	22,251 22,448 375 3,818 12,381 120,096	4.147 40.279 722 8.252 25.668 247,922	4,323 40,696 812 7,758 25,362 232,891	77.7 788.2 788.9 785.9 77.0 65.3	6.7 118 6.7 118 6.7 118	192 976 193 419 673 5	4,875 589 589 6,655 6,767	3,052 3,052 8 7,567 5,968	3.824 3.824 137 523 7.482 63.597
Chicago & Eastern Illinois 10 mos. Chicago & Illinois Midiand 0 oct. Chicago & North Western 10 mos.	862 862 121 9,287 9,299	27,446 27,446 6,593 17,006 152,384	2,153 2,153 1,428 15,666	3,195 32,039 743 6,758 20,290 185,076	3,394 31,124 6,520 21,698 196,005	716 4.052 45 481 3.071 29,642	450 3,823 51 562 2,965 30,587	299 299 7 669 363 3,788	5,328 1,118 1,081 2,994 29,699	5,128 1,128 1,080 2,760 34,645	1,437 242 242 992 9,943	1,363 31 307 468 4,571	1,274 12,347 1,556 1,556 8,327 81,397	25,849 25,046 3,860 16,081	24,056 24,056 447 3,945 16,088	89.2 78.2 53.0 67.1 84.4	8.8 4.6 4.6 7.3 6.3 7.4 8.4 2.8 8.4	346 993 350 898 793	55 1,816 1,830 1,530 1,213 2,837	3,180 1,263 1,803 6,759	3,849 1,174 3,157 -1,707
Chicago, Burlington & Quincy Oct.  Chicago Great Western  Oct.  Oct.	8,763 8,780 1,470 10,593 10,593	21,203 176,775 2,833 29,429 19,620 179,277	1,612 17,455 17,455 146 1,069 13,030	24,933 214,010 3,042 31,203 23,001 213,768	25,005 213,100 3,204 29,710 23,683 212,637	3,130 33,744 500 4,765 3,226 35,179	2,789 30,594 476 4,430 4,342 36,543	546 4,158 40 413 580 4,502	3,848 37,010 4,28 4,726 3,966 37,913	3,655 35,431 4,758 4,053 39,385	968 9,394 1,282 891 8,647	5,919 5,919 1,252 5,408	84,615 960 9,556 8,470 84,703	17.334 170.996 2.088 21.944 17.275 175,176	176,326 20,233 18,495 176,905	69.5 68.6 67.4 75.1	68.5 67.3 667.3 10.68.1 10.5 83.2 38.3	,599 ,614 ,953 ,953 ,726 ,592	3,734 1,942 1,899 3,983 6,859	2,935 17,328 3,883 3,883 3,985	3,290 20,384 3,735 2,303 13,051
Chicago, Rock Is, & Facific Oct. Clinchfield 10 mos. Colorado & Southern 0 cc. Oct. 10 mos.	7,631 7,601 293 293 718	15,172 146,772 19,362 1,290 11,361	13,979	175,671 175,671 19,466 1,465 13,358	17,382 166,879 2,398 21,148 1,465 12,744	2,752 25,005 2,905 2,902 2,925	2,758 23,382 2,768 2,974	2,486 2,480 200 200 260 199	29,634 29,634 3,984 2,162	2,923 28,067 391 3,742 2,108	5,983 99 981 65 65	5,483 59 59 59 36	7,012 67,524 4,584 4,584 5,293	14,140 136,833 17,668 18,668 19,555	13,514 128,292 1,327 12,360 1,103 10,237	78.5 65.3 79.1	77.7 3, 76.9 38, 55.4 6, 75.3 2,	8569 858 798 393 795	3,291 2,30 2,153 2,153 1,637	1,237 (2,441 6,688 1,010	1,809 16,659 1,025 8,067 143 670
Ft. Worth & Denver 10 mos. Colorado & Wyoming 0ct. Delaware & Hudson 10 mos.	1,362 1,362 39 39 771	15,647 15,647 2,455 4,684 44,377	1,533	2,286 19,000 3,827 4,985 47,368	2,537 19,234 3,077 5,307 47,879	3,257 3,257 176 5,619	326 2,809 243 243 612 5,423	314 314 59 599	2,599 2,599 34 417 821 7,755	326 2,815 387 387 7,074	45 438 112 114 1,841	709 709 11 102 1,002	7,4440 1,330 1,606 16,182	1,582 15,171 2,100 3,417 33,432	14,648 14,698 201 1,818 3,390 31,946	69.2 54.8 78.6 78.6	55.4 3 55.3 1 59.0 1 63.9 1	704 . 829 181 726 568 936	205 853 105 983 810 7,572	1,018 75 676 874 7,661	335 1,649 67 490 925 8,825
Delaware, Lacka, & Western Oct.  Denver & Rio Grande Western Oct.  Detroit & Toledo Shore Line Oct.  19 mos.	928 937 3,155 2,155 50 50	6,243 57,296 7,833 67,688 6,679	8,046 8,046 211 3,622	7,754 72,401 8,276 72,426 6,546	7,935 74,141 7,916 67,195 6,786	7.914 651 8,455 720	8,472 7,982 7,982 816	1,458 1,458 1,083 3,3	1,074 10,501 1,141 10,674 79 795	1,104 10,937 1,035 9,741 676	3,587 3,587 2,967 2,967 24 236	1,976 242 2,263 2,263 196	3,642 36,746 2,351 21,612 2,213	6,175 61,083 4,689 45,964 4,091	6,336 60,990 4,575 43,084 4,006	79.6 84.4 56.7 64.8 64.8	579.9 11 57.8 3 54.0 26 58.8 39.0	578 319 319 462 221 455	6,628 1,934 3,116 889	3,796 3,761 1,662 13,653 47 559	7,286 1,545 12,521 76
Detroit, Toledo & Ironton Oct.  10 mos.  Duluth, Missabe & Iron Range Oct.  10 mos.  Duluth, So. Shore & Atlante Oct.  10 mos.	4664 867 866 866 844 844	1,723 17,866 6,111 46,436 6,167		1,830 17,210 54,542 6,536	1,996 17,627 7,728 39,265 7,025	2,558 2,558 873 8,310 1,352	2,516 560 4,412 1,387	30 279 62 792 122 166	374 4,059 7,659 1,399	333 3,471 654 6,360 1,286	1,146 1,146 1,472 1,472 26 26 256	558 558 111 133 310	475 4,861, 1,889 16,070 2,423	1,239 13,026 3,611 31,300 5,730	1,130 3,471 25,422 5,555	67.7 69.8 59.8 57.7 87.7	59.3 68.9 14.9 3 14.7 23 75.7	591 Cr 5623 5680 5243 71 806	1,052 966 2,086 3,581 374	1,629 4,462 1,462 9,819 249	3,336 1,911 5,833 106 892
Duluth, Winniges & Pacific Oct.	175	5,101	.00	5,161	5,735	106 879	735	10 P4	990	757	1 6	2.8	1,793	3,426	354	66.4	71.7	156	42	422	319

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# REVENUES AND EXPENSES OF RAILWAYS

(Dollar Agures are stated in thousands; i.e., with last three digits omitted)

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAY YEAR 1957

Ilway	1956	639 4,181 2,082 12,894 3,586	47 47 47 47 47 47 47 47	4,820 25,542 46 222 908 6,385	3,378 23,874 1,189 663 6,784	82 602 285 1,145 119	2,254 1,696 5,832 497	466 1,642 4,589 3,246 26,052	2,185 2,185 216 1,662 74 725	723 3,402 1,103 1,103 4,388	4,206 33,291 1,324 1,324 671	4,651 1,208 8,275	2,423 18,108 696 1,188 527	51 214
Net Ral			1						1,726 1,726 1,770 665 664			3,279 27,942 1,642 8,429	2,246 16,852 345 1,903	24
Railway	100		- 1								2,494 19,453 1,108 1,108 286	5,587 57,167 7,671	2,566 29,621 1,105 10,659 915	33
from	0.0								4.439 4.439 4.755 1.626			10,512 100,056 696 5,356	5,400 42,611 2,829 25,567 1,066	166
ting	1956	66.38 66.38 73.06 73.06 73.06	888888 6.6.6.6.6.6 6.6.6.6.6.6.4	61.8 64.6 74.9 69.3 74.6	69.5 64.6 73.9 87.2 86.9	63.1 63.4 33.0 71.1 71.2	74.2 78.7 74.9 80.8 48.8 49.9	81.2 86.0 58.9 59.7 73.7	73.0 73.0 75.7 75.7 55.7	63.6 76.9 80.2 88.8 79.9	72.3 75.9 71.5 80.3 89.9 61.4	82.2 77.5 82.8	64.2 69.6 78.0 81.6 59.2	73.1
Opera	1957	71.6 69.0 77.3 81.6 78.5	89.1.6 75.0 84.0 90.1	72.9	77.1 79.1 71.9 78.6 57.4 57.9	\$6.6 \$9.6 \$5.9 \$2.9 \$61.6	74 786.3 786.3 85.9 85.9 85.9 85.9	85.3 62.4 89.1 82.8	80.7 76.8 775.2 877.6	78.7 81.0 46.6 55.4 77.6 80.8	73.8 76.7 76.7 83.0 64.6	83.7 81.0 85.8	66.3 70.9 80.1 81.4 73.9	65.8 81.0
									1,846 17,629 1,469 13,824 1,935			56,930 527,346 3,112 28,659	10,416 100,900 11,093 109,369 2,024	3,504
	1957	33,354 33,354 11,902 2,322 25,322	6,430 2,331 4,326 44,077	18.774 179.045 293 2.825 5.870 56,517	192,204 192,204 896 8,425 2,151 21,901	2,484 2,773 2,773 2,192	5,561 4,672 49,197 1,643	4,855 47,618 1,382 13,822 17,754 169,876	1,800 18,318 14,414 2,253 2,415	3,379 32,664 2,833 3,968 46,211	19,324 192,184 1,562 15,447 3,535	54,010 523,665 3,053 32,282	10,640 103,723 11,404 111,586 2,107	3,483
	Trans- portation	1740 17.573 6.805 66.598 1.015	294 3,100 88 895 2,446 24,934	8,284 80,089 1,192 2,499 24,030	9.724 90.865 410 3.894 11.575	86 916 1189 1,183 1,082	2,249 2,726 27,366 55 588	27,176 27,176 6,853 8,332 80,526	8,464 6,413 85 85 866	1,505 14,388 125 1,240 1,884 21,435	9,219 92,913 7,331 1,991	29,346 291,627 1,279 13,132	53,436 53,528 61,869 78 869	2,086
11	Traffic	4,843 4,843 86 86 899	2222 2222 859 969	5,334 2,334 241 340 2,981	6,219 51 485 112 978	323 323 20 20 18 18	226 226 148 1,509 49	36 283 80 794 504 5,118	249 106 1.047 271	102 972 111 2,200 2,206	7,105 1,105 1,037	11,194 11,247 81 791	3,632 2,237 2,291	948
Equipmer Deprec.	Retire-	5,554 5,454 1,000	332 332 79 79 933	7,896 9 92 292 2,848	8,710 40 397 1.04 1.04	116 118 1180 1180 83	472 472 2,037 14 94	1.671 9.4 970 1.176 11.680	81 91 842 111 107	1,337 30 303 2,620	1,036 10,227 79 743 111	23,538 23,538 274 2,657	4,24 4,285 4,285 4,24	124
Maint.	Total 1956	1,001 8,183 2,101 21,426 439 5,237	1,400 1,400 33 349 907 9,594	4,126 39,621 37 409 1,521 13,283	4,508 41,868 1,838 1,838 4,83 4,876	26 299 65 683 683 844 348	1.858 1.086 9.912 25 241	1,023 10,304 3,095 4,620 42,609	3,855 3,855 2,822 330 331	6,612 6,612 820 1,124 9,886	4,582 44,229 3,944 2,944 587	12,653 114,094 1,076 9,263	23,271 23,513 1,959 21,181 11	553
ctures	Total 1957	1,038 9,806 22,865 579 8,838	1,341 388 381 959	4,083 40,148 55 516 1,530 14,762	45.649 45.649 2.141 470 4.800	327 327 58 749 749 412	1,824 1,824 801 10,471 282	1,048 10,595 3,180 4,731 44,859	4,676 329 2,894 341	6,935 6,935 822 889 10,110	4,459 43,757 323 3,113 66	11,912 108,975 1,074 10,579	2.579 24.793 2.319 22.195 166	577
and Stru eprec.	tetire-	271 271 2,242 455 563	9 9 7 3 9 8 8 7 3 9 8 8 7 3 8 7 3 8	4,077 8 44 777 777	3,992 20 20 203 50 472	r=8877	726 996 994	102 934 16 177 292 2,912	25.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5	44 44 81 929	393 3,329 19 201 16 16	12,030	1,891 2,672 2,672 2,53	628
15											4,248 39,780 2,973 741	9,856 72,963 378 4,158	1,760 16,489 1,839 16,016 1,028	505
2											3.881 38.426 2.737 76	8,192 77,525 379 5,512	1,787 16,830 1,662 16,187 1,038	13
1	misc.) 1956	4,988 43,963 16,755 46,310 2,672 30,982	780 363 363 398 52,886	28.842 36,009 433 3,781 8,026 69,961	28,239 (48,025 1,304 11,114 3,845 39,583	4,269 4,849 4,878 2,786	2,017 7,017 6,648 59,518 3,297	5,668 53,776 2,510 23,481 22,876	2.345 22.897 1.990 18.017 3,746	5,009 40,579 601 4,913 6,373 61,660	27,699 254,476 3,120 18,909 5,340	69,218 650,227 4,016 34,595	16,224 145,065 14,226 134,026 3,527	506
Revenues	tal (inc. 1957											4.521 3,721 3,749 7,638	16,040 146,334 14,233 137,153 3,173	4.301
erating	Pass.	5.844 223 4.820	230	8,797 2 8,797 2 3,211	18,507 269 269 1,040	, . 0 + 0	2,556	41,989 41,989 47 510 694 9,183	914	748	58 740 26,186 97 9,620 251,324 330 632 18,595 632 18,595 5,265	6,316 73,510 528		111
00	Freight	4,012 39,136 13,241 130,243 2,374 25,105	5.995 2.98 2.764 4.160	22,629 210,953 396 3,789 7,002 63,442	21,552 202,778 1,064 9,072 3,281 33,496	4,155 4,106 4,106 3,202	801 6,524 5,418 51,834 2,944	1,288 11,981 2,056 20,417 20,028 181,365	2,006 20,435 1,891 18,462 3,784	3.986 37.652 617 5.078 4.427 49.910	23,058 219,197 1,830 16,538 5,238	49,453 475,853 3,492 35,376	15,313 140,084 8,419 77,352 2,946	3,736
Average		23.207 2,207 2,207 1,571		8.285 8.288 224 2.757 2.757	1	3277 1455 1455 96	85.67.44 85.67.44	351 351 746 5,704 5,704	944 1,391 1,392	33 5322		Included in Louisville & Nashv 10.621 49.453 6,316 6 10.621 475,853 73,516 62 221 3,492 44 3	1	
	Name of Road d	Elgin, Joliet & Fastern Oct.  Erie Cct Florida East Crast. 10 ros.	Georgia Railroad Cct. Georgia & Florida Oct. Grand Trunk Western 10 mos.	Green Bay & Western 16 mos. Green Bay & Western 0 Grt. Gulf, Mobile & Ohto. 10 mos.	Hinois Central   10 mos.   Hinois Terminal   10 mos.   Oct.   Hinois Terminal   10 mos.   Oct.   10 mos.   10 mos.	Kansas, Oklahoma & Gulf Oct.  Lake Superior & Ishpeming Cct.  Lehigh & Hudson River Oct.	Lehigh & New England Oct. Lehigh Valley 0ct. Litchfield & Madison 0ct.	Louisliana & Arkansas 10 mos.  Louisliana & Arkansas 0ct.  Louisville & Nashville 0ct.	Maine Central. 10 mos. Minneapolis & St. Louis 0.ct. Minn. Northfield & Southern 0.ct.	Minn., St. Paul & S. S. Marie, Oct. Missouri-Hillnois 0ct. Missouri-Kansas-Texas Lines Oct. 10 mos.	Missouri Pacific Oct.  Monon  Monongahe'a 10 mos.  Monongahe'a 10 mos.	Nashville, Chatt. & St. Louis Oct. I of mos.  New York Central Oct. 10 mos. Pittsburgh & Lake Erie Oct.	New York, Chicago & St. Louis Oct. 10 mos. New York, New Haven & Htfd. Oct. 10 mos. New York Connecting	New York, Susque. & Western Oct.

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# REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)
MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1957

	nallway perating ncome 1956	4,552 33,100 96 612 2,507 15,537	54 777 7.586 59.643 3.294	98 844 1.160 1.793 12.879	2,750 3,750 3,34 2,79	11,424 11,715 6 1,081 9,142	79 19.470 3.676 37.921	1,982 1,982 6,718 6,718	1,859 4,285 36,414 6,314	79 493 618 5,108 71 516	1,273 7,494 20 20 200 93 899	5,710 37,377 1,706 13,225 2,042 9,879	98 1,0990 8,734 6,99 5,779	3,050
	1957	4.688 37.983 83 642 2.612 15.013	36 3.937 43.639 -3.584	91 648 1.319 1.453 13,511	2,608 2,608 48 243 243 83	1,319 9,693 37 140 1,032 8,096	525 1,556 17,637 3,931	1,302 548 6,432 607	1,368 4,826 37,931 7,364	57 617 401 3,137 76 186	5,143 36 292 93 765	5,570 33,271 1,833 16,946 1,833	30 399 1,123 10,375 6,151	336
	Railway tax accruais	4,677 13,358 79 874 2,184 16,459	1.117 5.443 58.623 824	1,069 88 1,074 559 7,279	358 4,001 29 287 175	1,199 8,129 8,55 307 1,386 9,630	43 189 13.799 2.819 24.479	1,077 298 5,051 407	246 2,055 5,001 35,191 1,216 11,521	2,352 2,352 2,352 247	858 8.789 67 465 1.125	8,135 61,732 1,780 16,583 6,939	52 551 853 7,633 5,011	1,847
1	from railway operation	8,156 185 1,736 4,515 29,187	3,339 13,161 34,753 1,045	2,176 2,170 2,340 2,092 23,320	628 638 638 225	2,680 19,484 1,634 1,634 2,619 20,117	126 832 33,066 6,220 66,904	2,550 677 10,178 1,384	438 3,513 10,430 81,649 3,192 30,105	1,279 1,279 6,639 156 883	1,871 15,063 1,153 1,153 2,549	15,865 114,021 3,351 31,058 3,305 23,581	96 1.172 14.324 14.324 12.142	5,929
		W1-040-	-		66.8 64.4 79.4 81.5 61.6	78.1 78.5 73.9 70.3 61.7 62.4	64.8 68.3 69.4	78.1 67.6 66.2 77.5 77.5	60.1 57.5 78.6 80.9 76.7 76.8	49.7 61.1 66.9 70.0	70.70 71.8 69.4 69.1 69.3	45.6 47.3 47.3 75.6	79.3 79.3 71.9 76.9	69.3
	Operating ratio 1957 1956	62.8 67.0 79.7 73.5 81.3	71.6 68.1 84.4 83.9 110.8	250.6 72.2 72.2 79.7	70.1 66.3 883.2 87.5 87.5	75.4 62.3 72.4 56.7 65.7	75.4 77.7 72.5 72.5 72.5	89.8 79.1 79.1 82.1	62.0 66.8 77.4 73.0 74.2	55.55 75.25 77.32 77.32 77.33	71.8 59.2 58.7 66.5	43.2 77.7 77.5	88.8 88.3 769.2 73.9	75.6
	Total 1956	13.892 136.793 718 6.909 13.189 125.398	6,959 70,639 676,583 944 9,041	2.159 2.159 5.648 9.240 87.272	1,398 14,558 3,547 1,793	8,803 82,763 2,77 2,709 3,786 35,365	2.162 10.133 99.653 15.988 158,937	1,101 11,356 2,460 23,887 621 6,483	6.584 38.689 366.797 9.337 89.919	1,896 1,906 19,261 3,222	5,128 51,699 198 1,865 3,922	32,123 389,854 2,484 22,112 7,886 74,898	6,444 3,041 30,245 3,661 34,703	21,538
	Total 1957	13,781 143,715 724 7,272 12,509 126,505	728 71.046 704.681 910 9.076	2,219 6,088 9,370 91,545	1471 14.991 3.683 3.683 148 1,579	8,228 81,538 242 2,716 3,432 35,307	2.554 10.366 102.306 16.368 160.758	1,302 12,661 2,558 24,586 450 6,341	715 7,060 35,702 358,568 8,698 86,673	1,880 2,128 20,092 3,078	4,767 50,480 2,632 431 3,914	318,560 318,560 2,548 24,290 8,388 81,113	6,821 3,221 3,221 3,554 34,418	23,380
	Trans-	6,110 61,443 279 2,791 5,874 60,915	3,388 37,872 376,531 495 5,122	831 2,177 4,487 46,569	7,640 163 1,630 62 654	4,136 40,822 145 1,647 1,628 16,946	1,009 4,829 47,480 7,561	5,116 5,116 9,105 2,771	2,452 17,412 175,889 4,249 42,963	85 1,070 9,924 1,32 1,250	24,553 24,553 86 835 1,618	15,253 148,370 954 9,831 4,716 45,675	3,625 1,368 14,056 1,526 15,472	11.822
es pment	Traffic	3,813 52 513 513 393 4,026	7.6 1.345 14,110 108	285 755 755 2,033	293 302 302 24	3,831 26 26 263 187 1,963	4,167 4,880 4,880	39 83 828 828 1-1	242 242 856 8,478 2,724	62 35 333 18 178	2,007 113 117 54 529	040	32 322 139 1.240 237 2.160	8738
int. Equip	Deprec. and Retire- ments	980 9,180 322 702 6,638	3.007 30.279 30,279 267	44 432 432 4,891	673 673 17 166 8	5,745 5,745 159 1,59	193 670 6,293 1,021 9,787	736 736 2,069 125	2.297 22.624 22.624 1.78	1, 195 1, 195 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,	2,589 10 99 120 120	17,493 17,493 2,382 4,110	41 378 2,567 2,567 2,060	958 876
Operatir	Total 1956	3,947 41,453 1,241 2,833 28,248	1,055 17,592 167,173 1,274	34 299 149 1,383 2,168 21,391	3,133 3,139 113 113 148	17,098 17,098 334 873 7,090	27.715 25.435 25.435 46.163	3,624 5,94 6,306 72 814	149 10,420 97,818 1,671 16,887	32 299 415 4,298 78 690	1,114 10,804 31 310 50 501	7.984 76.427 714 6.528 1.462 13.694	1,487 7,464 7,464 6,319	432
Structure	Total 1957	3,954 41,437 1,328 2,876 2876 28,412	938 17,262 173,052 1,175	33 314 134 1.364 2.336 21.955	3,291 65 608 21 165	16,785 16,785 295 719 7,480	25.649 25.429 25.429 40.584	3,396 6,921 8,921 80 831	1,613 9,829 97,663 1,582 15,081	*	10,907 34 317 60 555	8,177 79,487 716 6,987 1,485	1,673 835 8,091 6,449	4,637
Vay and	Deprec. and Retire- ments	3,193 1,193 148 148 596 3,153	183 1.446 14,498 231	45 27 240 241 1,890	28 261 78 78 32	1,606 1,606 40 78 713	2,137 2,137 3,138	339 339 648 120	267 - 504 4,853 1,945	277 877 877 828	846.3 86.3 86.8 86.8	5,543 5,543 71 661 307 1,676	13 72 66 530 88 990	398
Maint. V	Total 1956	2.645 26.141 195 1.962 2.602 23.176	2,044 9,123 9,123 88,266 2,36	449 110 1.038 1.750 14,926	2,316 99 897 49 739	15,618 15,619 57 441 7,35 7,001		2,460 2,460 6,001 2,37 2,231	209 1,765 5,967 56,019 2,337 21,423	22 590 345 3,942 82 784	10,896 62 536 99 987	55,533 55,533 4,961 1,088	84 904 618 5.965 8.412	4.321
(	Total 1957	2,587 28,411 2,083 2,425 23,688	257 2,448 10,347 97,583 2,212	52 464 1.246 1.763 16.021	2,321 855 49 535	1,337 13,785 32 390 712 7,038	36. 1.855 18.844 3.262 30.805	317 2.726 690 5.743 1.883	2.016 5.431 54.543 1.922 19.669	48 578 4.19 4.155 719	9,335 60 551 109 812	56,863 56,863 648 5,757 1,347	96 989 6,083 7,487	438
	c. misc.)	22,219 199,242 1,004 8,816 18,072 158,475	11.166 11.055 88,726 826,269 8.120	4.748 8.89 7.742 12.460	2,093 22,612 471 4,354 1,354 1,841	11,269 105,424 3,853 6,134 56,632	3,293 12,818 134,701 23,418 229,006	1,572 15,116 3,636 36,109 796 8,361	1,200 11,447 49,237 453,215 12,176 117,045	3,106 3,079 28,811 490 4,455	7,281 67,449 2,688 2,688 6,487	48,275 426,714 5,514 46,771 11,325 99,105	8,133 4,639 62,880 5,091 65,144	3,175
	Total (in	214,436 909 9,008 17,023 155,692	1.017 10.457 84.207 839.433 8.032	813 8.389 8.427 11.462	22,599 22,598 4,321 1,804	10,908 101,632 3,750 6,051 55,425	3,386 13,337 135,372 22,588 221,662	1,450 15,211 3,235 34,765 7,725	1,153 10,573 46,132 440,217 11,800 116,778	3,160 2,830 26,731 3,961	6,638 65,543 3,186 3,186 6,463	48,273 432,582 5,899 55,348 11,693	7,993 4,729 46,466 4,673 46,560	3,150
	Operating Re Tot Pass.	2,726	35 9.025 102,319 94 1,366	5,88.73	346	3,434 4 38 38 11	810 11,814 845 11,638	529 68 1,241 509	26 25,283 25,283 3,680	819	3,480	1,807 23,997 390 4,381	10 10 30 30 2,013	31
	Freight	20.649 201,562 885 8.800 15,355 139,483	1,000 10,321 65,785 654,255 698 6,431	4,290 8,347 10,080 101,521	1,455 14,795 424 4,686 1,719	9,878 90,551 3,485 5,914 54,142	3.234 11.627 114.400 20.088 194.324	1,280 13,430 2,950 31,581 6,39 6,550	1,063 9,537 41,553 391,039 10,788	289 3,046 2,664 24,270 456 3,816	5,758 56,513 348 2,944 2,728 6,354	43,434 379,607 5,639 52,710 10,290 91,908	7.813 4.498 43.746 4.496 43.491	27,184
Average	operated during period	2,132 2,132 604 6,829 6,830	329 9,957 9,968 358 358	126 126 132 132 1,304 1,304	349 349 349 349	4,608 4,609 1,560 1,560 1,560	144 4,060 4,061 6,281 6,281	328 328 337 337 475 475	204 204 8,094 8,094 4,284 4,291	150 150 150 945 945 286 286	1,831 1,831 161 161 239 239	9.786 9.786 9.786 611 2.392 2.392	294 294 846 846 1.192 1.192	1.031
	paq	Norfolk & Western 0ct.  Norfolk Southern 10 mos.  Northern Pacific 0ct.	Northwestern Pacific 16 mos. Pennsylvania 10 mos. PennRead. Seashore Lines Oct. 10 mos.	Piedmont & Northern 10 mos. Pittsburgh & West Virginia 10 mos. Reading 0ct.	Richmond, Fred. & Potomac. Oct. 10 mos. Rutland Oct. 10 mos. Sacramento Northern Oct. 10 mos. 10 mos.	St. Louis-San Francisco Oct. St. Louis-San Fran. & Texas Oct. St. Louis Southwestern Lines Oct. 10 mos.	Savannah & Atlanta 10 mos. Seaboard Air Line 0 oct. Southern Railway 10 mos.	Alabama Great Southern 10 mos. Cinn., N. Orleans & Tex. Pac Oct. Georgia Southern & Florida Oct.	New Orleans & Northeastern Oct.  Southern Pacific 10 mos. Texas & New Orleans 0ct.	Spokane International 10 mos. Spokane, Portland & Seattle Oct. Tennessee Central 0 nos.	Texas & Pacific 10 mos. Texas Mexican 0 ct. Toledo, Peoria & Western 0 ct. 10 mos.	Union Pacific 10 Oct. Virginian 10 mos. Wabash 10 Oct. In Mos.	Ann Arbor 10 mos.  Western Maryland 0 Oct.  Western Pacific 10 mos.	Wisconain Central 10 mos.
		Norfo North	North Penns Pen	Piedmon Pittsburi Reading	Rich Ruth Sacra	St. L	Seab	Alah Ci	Sour	Spok Spok Tenn	Texa Toles	Union P Virginia Wabash	West	Wisc

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# MARKET OUTLOOK at a glance

# Carloadings Slip 2.4% in Week

Loadings of revenue freight in the week ended December 14 totaled 603,036 cars, the Association of American Railroads announced on December 19. This was a decrease of 14,802 cars, or 2.4%, compared with the previous week; a decrease of 113,616 cars, or 15.9%, compared with the corresponding week last year; and a decrease of 106,096 cars, or 15.0%, compared with the equivalent 1955 week.

Loadings of revenue freight for the week ended December 7 totaled 617,838 cars; the summary, compiled by the Car Service Division, AAR, follow:

REVENUE FREIGHT CAR LOADINGS

For the week	ended Sa	turday, De	cember 7
District Eastern Alleghany Pocahontas Southern Northwestern Central Western Southwestern	1957 92,271 109,862 53,953 116,741 68,769 124,411 51,831	1956 120,555 140,425 65,595 134,512 91,257 127,985 57,922	145,486 62,225 132,846 78,305
Total Western Districts	245,011	277,164	259,202
Total All Roads	617,838	738,251	721,518
Commodities: Grain and grain products Livestock Coal Coke Forest Products Ore Merchandise I.c.I. Miscellaneous	59,650 6,364 125,944 8,952 37,515 18,028 47,156 314,229	52,941 7,622 148,717 13,477 42,333 40,326 56,130 376,705	47,257 11,757 151,643 13,476 44,265 20,969 60,758 371,393
December 7 November 30 November 23 November 16 November 9 Cumulative total,	617,838 553,722 632,763 647,298 675,273	738,251 752,146 650,620 763,898 772,850	721,518 723,786 671,950 766,216 792,042
49 weeks3	3,896,766	35,942,206	35,689,008

IN CANADA.—Loadings of revenue freight for the seven-day period ended December 7 were not available when this issue of Railway Age went to press.

# **New Equipment**

SPECIAL

- ▶ All-Time Record Set by '57 Work-Equipment Purchases.—Dollar volume of U.S. and Canadian railroad work-equipment purchases in 1957 is estimated at \$35,200,000, the highest in history; prospects are that railroads in both countries will spend \$35,500,000 for work equipment in 1958; work-equipment units purchased this year are estimated at 8,480, highest since 1953; estimates and forecast are based on a comprehensive survey by Railway Track and Structures, a Simmons-Boardman publication.
- Mexico Plans \$60 Million Purchase.—National of Mexico reportedly plans to spend about \$60,000,000 next year for new equipment, says Foreign Commerce Weekly; equipment to be purchased would include diesel locomotives, freight cars and cabooses, rails and accessories, track machinery, electrical signaling and general electrical service equipment, and railway shop machinery; inquiries should be addressed to the railway at Bolivar 19, Mexico, D.F.

### LOCOMOTIVES

- ► Chihuahua al Pacifico (Mexico)—Ordered 2 general purpose 1,600-hp diesel-electric units, Fairbanks, Morse.
- ► South Africa Wants Locomotives.—Tenders for supply of various quantities of diesel-electric or diesel-hydraulic locomotives are invited by the Administration of South African Railways; tenders are returnable by next March 28, says Foreign Commerce Weekly; further information is available from South African Consulate, 655 Madison avenue, New York, N.Y.

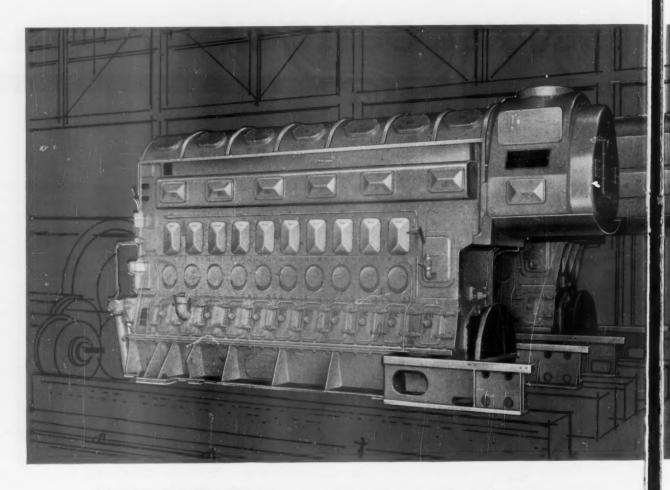
### FREIGHT-TRAIN CARS

► North American Car Corp.—Ordered 40 70-ton mill-type gondola cars, Bethlehem Steel, and two 70-ton covered hopper cars, Pullman-Standard.

# **New Facilities**

- ► Chicago Transit Authority.—Will spend \$12,000,000 for capital improvements in 1958 (in addition to equipment acquisitions); major projects include installation of new type two-way communications system on North-South rapid transit route that will enable dispatcher to talk directly to motormen on in-service trains; construction of four-track right-of-way in Wilson Avenue station area, plus engineering work for installation of additional block signal and automatic train control equipment when funds are available; also included are automation of two substations, purchase of land for contemplated consolidated rapid transit-bus terminal, Howard yard expansion, construction of new rapid transit station, material storage facilities, two inspection shops, car washer.
- ▶ Lehigh & Hudson River.—Installing Bendix two-way radio on 13 locomotives, 8 cabooses (walkie-talkies) and 5 wayside stations; stations are to be controlled by the dispatcher, which will permit him to make radio calls directly to trains, and engine crews to call him; stations will be placed to provide solid radio coverage to trains and engines.

O

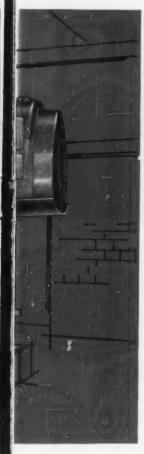


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# Monorail Transit for Detroit?

Bogged down like any other American metropolis by a lumbering transit situation, Detroit may use a monorail system to solve its problems.

Proposals for such a venture will be laid before the Detroit mayor and city council within a month. The Detroit Rapid Transit Commission will file recommendations then for a 54-mile elevated structure which would cost an estimated \$256,000,000 to

Cost could vary because of different types of equipment that might be used. The commission announced its general plan in anticipation of the formal filing.

Basic to the commission's findings-following a two-year study—is the conclusion that mass public transportation has to be gotten off the ground to be effective. That means, the commission felt, that vehicular expressways are not the answer. Rapid transit must be kept clear of crowded city streets, the report contended.

The bond-financed scheme would start with a full-length test line on one of six main thoroughfares to be served in the original 54-mile layout. It's contemplated that the system could be extended to a total of 144 track miles, serving such Detroit suburbs as Pontiac and Ypsilanti. The 54mile network would be completely in the city limits, and would have 88 stations and 34 parking lots.

The monorail system proposed by the commission would have cars suspended from inverted L-shaped structures based along the street curbing.

The trains would run about 15 feet above the streets.

Engineering specifications for the structure and the cars themselves have not yet been worked out, J. L. Perentesis, commission director, said. Favored by the commission is a "split-rail" system of suspension different from the exhibit unit at the fair grounds in Dallas, he said.

The idea is patterned after an alternate proposal made by a transit-survey body for San Francisco. However, Mr. Perentesis emphasized, the commission is not unalterably committed to any specific type-except that its whole plan is based on the fundamental monorail idea.

Profitable operations in Detroit are possible, the commission feels, through a zonefare schedule. It points to the operations of Cleveland and Toronto transit, notably the former where 20% of today's transit riders are said to have been won back from automobile commutation.



## Clan Colors Cap Gordon Tour

During a survey of Canadian National lines in the United States, CNR Chairman-President Donald Gordon paused to discuss Canadian-U.S. relations. He met with R. D. Stuart (left), U.S. chairman of a committee promoting Canadian-American understanding, and Canadian Consul General G. A. Newman (center). Mr. Gordon sports Balmoral cap (with Gordon clan crest), presented to him on tour.

# NYC Petitions PUC To Lop Off 10 Trains

The New York Central last week entered petitions to discontinue its Indianapolis-St. Louis and Toledo-Cincinnati passenger service. Ten trains are involved, eight of them on the Indianapolis-St. Louis route.

Central's petitions were filed with the Public Utilities Commissions of Illinois, Indiana and Ohio. Declining patronage, heavy financial losses and the availability of alternate service were cited by the road.

Ernest C. Nickerson, NYC vice-president, passenger sales and service, estimated the road will sustain an "above the rail" loss of about \$1,289,978 this year on the two routes' passenger operations. Between September, 1946, and September of this year, he said, patronage declined 76.7 per cent on the Indianapolis-St. Louis service, 51.7 per cent on the Toledo-Cincinnati operation. During this same period, he added, NYC (system-wide) spent more than \$168,000,000 for new passenger equipment and approximately \$13,600,000 on advertising the service. But, he declared, "despite this effort, our passenger deficit over that decade totaled more than

ICC action this year, he added, "removed any doubt as to what our policies should be-by denying us a large enough increase in freight rates to make up passenger losses and to provide a fair return on investment."

Central is seeking to drop the following trains: St. Louis-to-Indianapolis, The Southwestern, Knickerbocker, Missourian and Cleveland Special; Indianapolis-to-St. Louis, The Knickerbocker, Southwestern, Missourian and Gateway; Cincinnati-to-Toledo, The Michigan Special; and Toledoto-Cincinnati, The Ohio Special.

# 1957 Outlays Will Be Up 12.7%

This year's gross capital expenditures of Class I railroads are now expected to total more than \$1,377 million.

This was indicated by railroad reports summarized by the ICC's Bureau of Transport Economics and Statistics in its "Transport Economics." The reports cover actual expenditures made in this year's first nine months by the 110 Class I linehaul roads and fourth-quarter estimates

submitted by all but five of the same

The \$1.377 million would be an increase of 12.7% above the comparable 1956 total of \$1,221 million.

First-quarter estimates for 1958 were also submitted by all but five of the reporting roads. These indicate that next year will get under way with expenditures 14.6% below this year's first quarter.

### Actual and estimated gross capital expenditures class I line-haul railroads

Period	Number of Roads	Expenditures for road	Expenditures for equipment	Total
Actual:		Thousands	Thousands	Thousands
January-September 1956	110	\$281,659	\$614,836	\$896,495
October-December 1956	110	124,841	209,627	334,468
Total 1956	110	406,500	824,463	1,230,963
Total 1956 adjusted1	105	402,333	818,938	1,221,271
January-September 1957	110	278,731	783,697	1,062,428
Estimated:			,	.,,,
October-December 1957 <sup>a</sup>	105	89,857	224,480	314,337
Actual and estimated:				
Total year 1957	-	368,588	1,008,177	1,376,765
Actual:				
First quarter 1957	110	84,001	258,344	342,345
Estimated:				
First guarter 1958 <sup>3</sup>	105	72.727	219,487	292,214
Percent of change:				
January-September 1957 vs. same				
period in 1956 (actual)		d1.0	27.5	18.5
Year 1957 (actual and estimated)				
vs. 1956 adjusted	-	d9.4	23.1	12.7
First quarter 1958 (estimated)		301-0	20.1	18.17
vs. same period in 1957 (actual)	_	d13.4	d15.0	d14.6

1 Total figures adjusted to eliminate 4th quarter 1956 expenditures of 5 roads which did not furnish estimates for the 4th quarter of 1957.
2 Estimates for the 4th quarter of 1957 were not furnished by 5 roads. In the same quarter of 1956 these carriers made expenditures of \$4.2 million for road and \$5.5 million for equipment.
2 Estimates for the 1st quarter of 1958 were not furnished by 5 roads. In the same quarter of 1957 these carriers made expenditures of \$2.6 million for road and \$5.0 million for equipment.

# People in the News









J. D. Taylor

ALTON & SOUTHERN-BAUXITE & NORTHERN-MAS-SENA TERMINAL-POINT COMFORT & NORTHERN-ROCKDALE, SANDOW & SOUTHERN .-- J. R. Ford, vice-president and treasurer of the A&S and secretary and treasurer of the other four above roads at East St. Louis, Ill., retired November 30. L. L. Schaltenbrand named secretary, treasurer and controller of the five roads.

ASSOCIATION OF AMERICAN RAILROADS.-Russell H. Buchanan, a member of the Car Service Division, AAR, since 1936, named district man-ager at Cincinnati, Ohio, December 1, succeed-ing the late John P. Deckter.

CANADIAN NATIONAL.—E. K. House, employee relations assistant, appointed assistant to vice-president—organization and employee relations,

J. L. Conn, district engineer, Montreal district, Montreal, appointed engineer maintenance of way, Central region, Toronto, Ont., succeeding the late F. W. Compbell. J. A. Des Troismoisons, assistant terminal construction engineers neer, succeeds Mr. Cann.

A. W. Jackson, assistant to general superintendent of transportation, Toronto, appointed superintendent of transportation, Northern On-tario district, North Bay, succeeding A. L. Enborg, retired.

Joseph U. Gollont, assistant supervisor of employment, appointed personnel assistant, Atlantic region. Leslie C. Collord named supervisor, of regional employment office, Montreal.

A. R. MacDougall, executive representative, Ottawa, Ont., retired November 30.

CANADIAN PACIFIC.—P. E. Croghan, assistant general freight agent, Chicago, appointed foreign agent, Toronto, On:

F. J. Fryer, assistant chief of transportation, Montreal, appointed chief of transportation there, succeeding R. E. Taylor, who retired November 30.

GREAT NORTHERN.—Effective January 1, John L. Robson, chief mechanical officer, St. Paul, appointed to newly created position of assistant



James H. Heron



F. J. Fryer

vice-president, operations. James H. Heron, su-perintendent of motive power, named to replace Mr. Robson. J. D. Taylor, staff assistant to vicepresident, operations, named assistant to vice-president, to succeed William B. Irwin, who retires December 31.

H. E. Evans, New England passenger agent, Boston, appointed general agent there, suc-ceeding Charles H. Walker, retired. John P. Connolly, traveling passenger agent, St. Paul, succeeds Mr. Evans.

Worthington L. Smith, trainmaster, Seattle, named staff assistant to general manager, lines East, Duluth, to succed Paul A. Nemcek, resigned to become secretary and treasurer of the Lake Superior Terminal & Transfer Co. of Wisconsin. INTERSTATE COMMERCE COMMISSION.-In contemplation of the retirement, in November 1958, of Wendell Y. Blanning as director, Bureau of Motor Carriers, Washington, D.C., Herbert Qualls has been moved up to be assistant director for all bureau activities. George A. Meyer, field assistant, replaces Mr. Qualls as assistant director in charge of field staff.

MISSISSIPPI CENTRAL.-Warren F. Ratcliff, assistant general agent, Atlanta, Ga., appointed general agent there.

MISSOURI KANSAS & TEXAS TRANSPORTATION COMPANY.—Clyde E. Bulkley, assistant general manager, appointed general manager, Dallas, Tex., to succeed Theodore F. Behler, resigned.

MISSOURI PACIFIC.-Adolph Kuepfert, general freight agent, St. Louis, retired December 1. S. B. Bazan appointed assistant general freight agent-rate quotations, St. Louis.

NEW YORK CENTRAL .- A. W. Morgan, freight



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Thomas R. Klingel

sales manager, Chicago, retired November 30.

NORFOLK & WESTERN.-W. C. McIntosh appointed assistant district manager, coal bureau, Cincinnati, Ohio, succeeding J. K. Goodwin, resigned.

Effective January 1, 1958, the office of E. J. Schorfler, general agent, Cleveland, now at 1819 Union Commerce Building, will be in Room 724, Illuminating building, Cleveland 13.

PENNSYLVANIA.—Collins S. Van Gunten, assistant superintendent transportation, Lake region, Cleveland, transferred to the Buckeye region, Columbus, Ohio, succeeding Joseph A. Bonelli, who replaces Mr. Van Gunten at Cleveland.

SANTA FE.—F. N. Stuppi. who has been on temporary assignment (Railway Age, Sept. 23, p. 37), resumed his duties as assistant general manager, Coast Lines, Los Angeles, effective

December 10, succeeding E. R. Robertson, who has resumed his duties as superintendent, Kansas City division, Argentine, Kan., replacing R. H. Adoms.

SOO LINE.—Joseph D. Bond, general manager, Minneapolis, elected vice-president and director, to succeed Relph H. Simpson, who retires January 1. Mr. Simpson resigned as a director on November 30. Mr. Bond's successor is Lewrence V. Johnson, chief engineer, who in turn is replaced by Thomas R. Klingel. assistant chief engineer, maintenance of way. Raymond C. Postels, division engineer, Enderlin, N.D., named to succeed Mr. Klingel.

# Supply Trade

K. F. Sheeran has been appointed general manager of Railway Purchases and Stores, it was announced last week by the magazine's publisher, Robert G. Lewis. He will be located in the Chicago office. Edward Wray, who was publisher of Railway Purchases and Stores until its recent acquisition by Simmons-Boardman (Railway Age, Dec. 9, p. 49), will continue to serve in an editorial and advisory capacity. Mr. Sheeran has served as business manager for Railway Purchases and Stores for the past 33 years, following six years of railroad service in various capacities.

American Photocopy Equipment Company (Apeco) has established Apeco de Mexico, S.A., a wholly owned subsidiary, to handle sales of its equipment and supplies in Mexico. Jerome Korn, formerly with the Chicago headquarters, has

been appointed manager of the operation, at Mexico City.

Robert F. Bogan has been appointed manager in charge of special railroad projects for the sales department of Pullman-Standard Car Manufacturing Company.

R. K. Tobin has been transferred to Chicago as district sales manager for the Railroad Loading Division of Evans Products Company. He was formerly at the company's Plymouth, Mich., plant.

W. W. Hunly, Jr., has been appointed manager of sales, San Francisco area, for the Wood Preserving Division, Koppers Company. A former Koppers employee, Mr. Hanly has returned to the company from a position with the Wood Treating Chemicals Company.

Word Dickover, formerly consultant and director of the battery laboratory, National Bureau of Standards, Washington, D.C., has been appointed vice-president in charge of operations of the K. W. Buttery Compony, Skokie, Illinois.

The Waukesha Motor Company, Waukesha, Wis., has purchased the complete plant and assets of the Climax Engine Manufacturing Company, Clinton, Iowa.

A. C. MacDonald has been named executive vice-president, industrial, of A. V. Roe Canada Limited. Mr. MacDonald, formerly president and managing director of Canadian Car Company, a Roe subsidiary,—was succeeded in that position on December 1 by Stephen G. Harwood, formerly vice-president of Montreal Locomotive Works, Ltd., an associate of Alco Products, Inc.

# Railroading



After Hours with Jun Lyne

OVER 300,000 "OUTRAGES"—Our October 7 article, which we entitled "Outrage," has

now exceeded 300,000 copies in print. You'll recall that the article presented pictorially the kind of shellacking the U.S. is giving the national welfare by hobbling the railroads.

The push that put the total copies over 300,000 came from the Southern Railway—which is ordering 10,000 reprints of the article in the form in which it was reprinted in the Southern's magazine "Ties". These copies will go to shippers.

I was happy to see that Commissioner Minor devoted a large part of a recent address to a point-by-point discussion of the article. His comment was constructive and temperate—the kind of discussion that makes for progress in understanding, i.e., the kind of discussion that will eventually edge the railroads out of the governmental dog-house.

MUTUAL IMPOVERISHMENT—"The reason business is off the way it is, is that heads

of businesses are playing a game of mutual impoverishment. That is, each one is trying to see how little he can spend—hence just how far he can go toward putting other businesses out of business. This is quite a game. Business played it so successfully in the early thirties that they practically brought the country to a stand-still. As a result, they got Roosevelt."

This paragraph is a direct quotation from a chief railroad executive. What he says is doubtless an exaggeration, but I don't think it can be entirely laughed off either.

"The best friend U.S. business has today is Krushchev"—this railroad executive went on to say. "With Russia as active as it is, the government won't be able to let industrial activity unwind down to the level of '32."

FREEZE THE JOBS?—On another page in this issue we report a speech by President T. C. Carroll of the maintenance-of-way union. We aren't reporting this speech because we agree with it, but because what Mr. Carroll says is important information for railroad people to have.

Mr. Carroll naturally wants to go a little easy on introducing labor saving devices. But the hard fact is that when you slow down mechanization, you cut off the only revenue from which higher wages and a higher standard of living can come.

This is entirely different from what is ordinarily called "employment stabilization"—that is, on an annual basis, where employment is kept at a reasonably dependable level throughout the year. Such stabilization, to the degree that it is possible, has a lot to commend it.

BELZONI, MISS.—A couple of prominent Argentine railroaders recently dropped in at our office. They were: Ing. Eduardo Huergo, chairman of the Permanent Commission of the Pan American Railway Congress Association; and Guido Belzoni, manager of the General Roca Railway.

Ing. Belzoni had noted on a U.S. map a town on the Y&MV bearing his name, and thought perhaps it had been named for some of his kinfolks. I asked George Crowson of the Illinois Central about this and, with no delay at all, got word from him on the probable source of the name of Belzoni, Miss.—which I've passed along to Ing. Belzoni at Buenos Aires.

All of which goes to show how thoroughly the IC is an informed citizen of the communities it serves—even the smaller ones. Do you suppose any truck, water or bus line could promptly come up with this kind of information on its local communities?

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# Craft Unions Are on the Spot

The motormen of New York's transit system have been getting a pushing around in their dispute with the transit workers' (Mike Quill's) union. This is just one more symptom of the plight of craft unionism.

If the railway union leaders have not been watching the turn of events in the transit industry with great anxiety, then they are a lot less alert and intelligent than we believe they are.

Craft unions will have to take on some of the sources of strength of the industry-wide unions—or expect to lose out to the Quills and Reuthers.

Trouble began for the unions when they supported Roosevelt in his legislative program to force the rank and file of all employees into unions. Skilled employees are fewer in number than the unskilled and semiskilled. Thus, compulsory unionism has put craft unionism in the minority. The old-line craft unions have lost their dominance in the labor movement.

To managements, the new-style industry unions often seem preferable to the old-line unions. For one thing the industry unions are alert to their interest in the prosperity of the industry that employs their members. Our information is that the auto workers' union makes no effort to tell employers how many operators to use on a given machine. Nor does it resist the introduction of labor-saving machinery. Neither the steel union nor the mine workers' organization, we are told, goes in for "make work" rules.

However, in spite of all these evident theoretical merits of industry unionism, in comparison to craft unionism—this paper finds it hard to believe that it would constitute progress to have a Mike Quill take over the railway labor movement. But whether we like Mike Quill or not—if he can get a majority of employees and em-

ployers and politicians to believing that he will do more for them than the craft unions can, then he or somebody like him will be in.

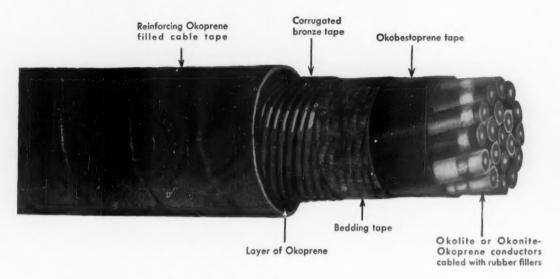
For the good of the railroad industry—and that of the loyal railroaders who head the principal railway labor unions—we hope they will move fast to correct the weaknesses of craft unionism as practiced on the railroads.

There is no group of people in the country—certainly not railroad management and certainly not government—who could do as much as the railway union leaders could, to get the railroad industry out of the doldrums, and on the upgrade again. This they could do by avoiding onerous working rules, as the big industry-wide unions have done. And they could protect themselves from harm in such action by stipulating that economies thus effected would be used by the railroads, primarily, to reduce rates and improve service on competitive traffic.

It is unlikely, of course, that union managements can abandon all support of "feather-bedding"—as long as there are so many unions, each representing only one craft. There are too many unions on the railroads. Suppose there were only one "operating" union, instead of five; and that all trainmen would qualify as enginemen and vice versa. There would then be no need of "full crew" rules to protect each occupation. Without such rules, the railroads could afford to run more and shorter trains, with the consequent likelihood of improved traffic and dependable growth of the railroad industry.

Under such a regime there would be far more assurance of job security than the railroads will ever be able to offer to train and engine employees as long as burdensome rules keep the railroads competitively weak.

UNION STATESMANSHIP: There is still time for the railway unions to correct the excesses of craft unionism—which have made them vulnerable to the likes of Mike Quill. For their sake—as well as that of everybody else around the railroads—we hope they will move energetically in 1958 to develop statesmanship, so urgently needed to make these unions the constructive force they could easily be.



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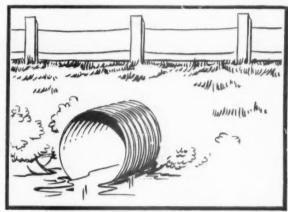
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